Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	137	(((standard or special) near2 (descriptor$2 or name$2 or identifier$2)) same (quer$3 or search$3)) and (@ad<"20000216")	US-PGPUB; USPAT; IBM_TDB	OR	ON	2005/03/18 14:01
L2	54	(((standard or special) near2 (descriptor$2 or name$2 or identifier$2)) same (quer$3 or search$3)) and (@ad<"20000216") and "707"/$. ccls.	US-PGPUB; USPAT; IBM_TDB	OR	ON	2005/03/18 14:08
L4	219	(((standard or special or regular or general or universal or comman or specific) near2 (descriptor$2 or descripter$2 or name$2 or identifier$2)) same (quer$3 or search$3)) and (@ad<"20000216") and "707"/$. ccls.	US-PGPUB; USPAT; IBM_TDB	OR	ON	2005/03/18 14:13
L5	6307	(((reference with logic) or map$5 or translat$5 or match$3 or relat$3 or deriv$3 or refer$7) same (quer$5 or search$3)) and (@ad<"20000216") and "707"/$. ccls.	US-PGPUB; USPAT; IBM_TDB	OR	ON	2005/03/18 14:12
L6	210	(((standard or special or regular or general or universal or comman or specific) near2 (descriptor$2 or descripter$2 or name$2 or identifier$2)) same (quer$3 or search$3)) and (((reference with logic) or map$5 or translat$5 or match$3 or relat$3 or deriv$3 or refer$7) same (quer$5 or search$3)) and (@ad<"20000216") and "707"/$. ccls.	US-PGPUB; USPAT; IBM_TDB	OR	ON	2005/03/18 14:13
L10	2	"200028725"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/18 17:06
S1	11	((query$3 or search$3 or retriev$3) with (independent or without or unknown or different) with (database or file or record) with structure).ab. and (@ad<"20000216")	US-PGPUB; USPAT; IBM_TDB	OR	ON	2004/09/02 19:59

S2	150	((query$3 or search$3 or retriev$3) with (independent or without or unknown or different) with (database or file or record) with structure) and (@ad<"20000216")	US-PGPUB; USPAT; IBM_TDB	OR	ON	2004/02/21 18:01
S3	107	(((query$3 or search$3 or retriev$3) with (independent or without or unknown or different) with (database or file or record) with structure) and (@ad<"20000216")) and "707"/$. ccls.	US-PGPUB; USPAT; IBM_TDB	OR	ON	2003/03/18 12:54
S4	4	(((query$3 or search$3 or retriev$3) with (independent or without or unknown or different) with (database or file or record) with name).ab. and (@ad<"20000216")) and "707"/$. ccls.	US-PGPUB; USPAT; IBM_TDB	OR	ON	2003/03/18 12:56
S5	95	(((query$3 or search$3 or retriev$3) with (independent or without or unknown or different) with (database or file or record) with name) and (@ad<"20000216")) and "707"/$. ccls.	US-PGPUB; USPAT; IBM_TDB	OR	ON	2003/03/18 13:55
S6	269	(match$3 with (query$3 or search$3) with (database or file) with (name or column)) and (@ad<"20000216")	US-PGPUB; USPAT; IBM_TDB	OR	ON	2003/03/18 13:58
S7	130	((match$3 with (query$3 or search$3) with (database or file) with (name or column)) and (@ad<"20000216")) and "707"/$. ccls.	US-PGPUB; USPAT; IBM_TDB	OR	ON	2003/03/18 13:58
S8	43	((match$3 with (query$3 or search$3) with (database or file) with (name or column)) and (@ad<"20000216")) and descriptor	US-PGPUB; USPAT; IBM_TDB	OR	ON	2003/03/18 13:58
S9	18	((quer$3 or search$3) with refer$9 with (standard or common) with structure) and (@ad<"20000216")	US-PGPUB; USPAT; IBM_TDB	OR	ON	2003/08/27 15:17
S10	5	"5940817".pn. or "5930799".pn. or "5878214".pn. or "5662478". pn. or "5504837".pn.	US-PGPUB; USPAT; IBM_TDB	OR	ON	2003/08/31 22:01
S11	1	"20020083052"	US-PGPUB; USPAT; IBM_TDB	OR	ON	2005/03/18 17:06

S12	24	((data or standard or flexi$7 or dynamic$7) adj (dictionary or table)) and ((convert$3 or translat$3 or lookup$3 or (look adj up)) with (query or search) with (string$2 or term$2 or name$2)) and (@ad<"20000216") and "707"/$.ccls.	US-PGPUB; USPAT; IBM_TDB	OR	ON	2003/08/31 22:58
S13	201	((translat$5 or convert$5) with (table or dictionary) with (query or search)) and (@ad<"20000216") and "707"/$.ccls.	US-PGPUB; USPAT; IBM_TDB	OR	ON	2003/08/31 23:22
S14	184	(((translat$5 or convert$5) near3 (table or dictionary)) same (query or search)) and (@ad<"20000216") and "707"/$.ccls.	US-PGPUB; USPAT; IBM_TDB	OR	ON	2003/09/01 16:30
S15	69	(((translat$5 or convert$5) near3 (table or dictionary)) same (quer$5 or search$3)) and ((translat$3 or convert$3 or map$5) with (quer$5 or search$3) with (term$2 or word$2 or keyword$2 or name$2)) and (@ad<"20000216") and "707"/$.ccls.	US-PGPUB; USPAT; IBM_TDB	OR	ON	2003/09/01 18:56
S16	23	((metadata or (meta adj data)) with (quer$5 or search$3)).ab. and (@ad<"20000216") and "707"/$.ccls.	US-PGPUB; USPAT; IBM_TDB	OR	ON	2003/09/01 18:55
S17	50	((metadata or (meta adj data)) same (quer$5 or search$3)) and ((((translat$5 or convert$5) near3 (table or dictionary)) same (quer$5 or search$3)) or ((translat$3 or convert$3 or map$5) with (quer$5 or search$3) with (term$2 or word$2 or keyword$2 or name$2))) and (@ad<"20000216") and "707"/$.ccls.	US-PGPUB; USPAT; IBM_TDB	OR	ON	2003/09/01 18:57
S18	53	(decentraliz$5 same (quer$3 or search$3)) and (@ad<"20000216")	US-PGPUB; USPAT; IBM_TDB	OR	ON	2003/09/06 17:08
S19	105	decentraliz$5 and (quer$3 or search$3) and (modif$3 or revis$3 or chang$3) and (@ad<"20000216") and "707"/$.ccls.	US-PGPUB; USPAT; IBM_TDB	OR	ON	2003/09/06 17:18

S20	88	((modif$3 or revis$3 or chang$3) with (quer$5 or search$3) with (local or different or "other" or "another" or "each") with database) and (@ad<"20000216")	US-PGPUB; USPAT; IBM_TDB	OR	ON	2003/09/06 18:03
S21	162	((query$3 or search$3 or retriev$3) with (independent or without or unknown or different) with (database or file or record) with structure) and (@ad<"20000216")	US-PGPUB; USPAT; IBM_TDB	OR	ON	2004/02/21 18:01
S22	6945	(standard near3 structure) and (@ad<"20000216")	US-PGPUB; USPAT; IBM_TDB	OR	ON	2004/08/30 14:13
S23	2423	(standard near3 descript$5) and (@ad<"20000216")	US-PGPUB; USPAT; IBM_TDB	OR	ON	2004/08/30 14:18
S24	478	((standard near3 structure) and (@ad<"20000216")) and quer$3	US-PGPUB; USPAT; IBM_TDB	OR	ON	2004/08/30 14:13
S25	350	((standard near3 descript$5) and (@ad<"20000216")) and quer$3	US-PGPUB; USPAT; IBM_TDB	OR	ON	2004/08/30 14:18
S26	42	(((standard near3 structure) and (@ad<"20000216")) and quer$3) and (((standard near3 descript$5) and (@ad<"20000216")) and quer$3)	US-PGPUB; USPAT; IBM_TDB	OR	ON	2004/08/30 14:19
S27	8741	(special near3 (structure or descript$5)) and (@ad<"20000216")	US-PGPUB; USPAT; IBM_TDB	OR	ON	2004/08/30 14:20
S28	331	((special near3 (structure or descript$5)) and (@ad<"20000216")) and quer$3	US-PGPUB; USPAT; IBM_TDB	OR	ON	2004/08/30 14:18
S29	0	((((standard near3 structure) and (@ad<"20000216")) and quer$3) and (((standard near3 descript$5) and (@ad<"20000216")) and quer$3)) and (((special near3 (structure or descript$5)) and (@ad<"20000216")) and quer$3)	US-PGPUB; USPAT; IBM_TDB	OR	ON	2004/08/30 14:19
S30	8692	(standard near3 (structure or descript$5)) and (refer$5 or lookup$3) and (@ad<"20000216")	US-PGPUB; USPAT; IBM_TDB	OR	ON	2004/08/30 14:20
S31	15	(standard near3 (structure or descript$5)) and ((refer$5 near3 logic) or (lookup$3 near3 (table or database))) and (special near3 (structure or descript$5)) and (@ad<"20000216")	US-PGPUB; USPAT; IBM_TDB	OR	ON	2004/08/30 14:21

Google Web Images Groups News Froogle Local[New] more »
standard special descriptor reference logic Search Advanced Search Preferences

Web Results **1** - **30** of about **64,300** for **standard special descriptor reference logic**. (**0.26** seconds)

Contents
... **Standard** C/C++ Library Functions; XML Parser for C++ ... **Special** Files; Device Drivers and Commit Scopes; User ... Cleanup of an Open File **Descriptor**; TPF_FSDD_PUT-Write ...
publib.boulder.ibm.com/infocenter/tpfhelp/ topic/com.ibm.tpf.doc.4.1-PUT19/gtpc2/gtpc2m02.htm - 84k - Cached - Similar pages

Extending the WebSphere Application Server administrative system ...
... Application Server process, including **standard** MBeans, dynamic ... you can use the **special** distributed extensions ... class reads your XML MBean **descriptor** file and ...
publib.boulder.ibm.com/infocenter/ws60help/ topic/com.ibm.websphere.nd.doc/info/ae/ae/tjmx_extend.html - 11k - Cached - Similar pages
[More results from publib.boulder.ibm.com]

Letter S – Acronym **Reference**
... SLDT, Store Local **Descriptor** Table. ... SPP, Sequenced Packet Protocol **Standard** Printer Port. ... SPR, **Special** Purpose Register Statistical Pattern Recognition. ...
www.newbie.org/**reference**/spellb_s.html - 46k - Cached - Similar pages

Letter D – Acronym **Reference**
... Language Device Clear Digital Control **Logic** Digital Command ... DDB, Device Dependent Bitmap Device **Descriptor** Block. ... DES, Data Encryption **Standard** Data Entry Sheet. ...
www.newbie.org/**reference**/spellb_d.html - 40k - Cached - Similar pages
[More results from www.newbie.org]

QuickLogic - Embedded **Standard** Products... Beyond Programmable ...
... has minor differences from the **standard** MIPS system ... 6. Are there any **special** timing considerations when ... register to '1' results in **descriptor** write back to ...
www.quick**logic**.com/home.asp?PageID=453&sMenuID=333 - 57k - Cached - Similar pages

Patent 4079453: Method and apparatus to test address formulation ...
... latches the **descriptor** selected into **special** test registers ... of one of the **standard** **descriptor** formats used ... of the advantages of the **descriptor** enforced access ...
www.freepatentsonline.com/4079453.html - 34k - Cached - Similar pages

Web Application Development with JSP and XML– Part IV: Using J2EE ...
... the J2EE specification defines a **standard** way for ... They are **special** references in the application component's ... <description> : an optional **descriptor** of the EJB ...
developer.java.sun.com/developer/ technicalArticles/xml/WebAppDev4/ - 38k - Cached - Similar pages

ISIS - Thesaurus Maintenance & Selection iIIIIIi sSSSSSSSSs ...
... the Thesaurus, which defines the usage of a **descriptor**. Its **special** processing had been described above ... addition to the above described '**standard**-relations', in ...
146.102.64.30/kizi/cesnet/ ISIS0FTP/zbytky-ruzne/cdsthes.tisk.PC - 73k - Cached - Similar pages

oreilly.com – Online Catalog: JavaServer Faces
... Implementing the Business **Logic** Classes Authentication ... C. **Standard** JSF Components and Render Kits. ... Web Application Structure and Deployment **Descriptor Reference**. ...
www.oreilly.com/catalog/jsvrfaces/toc.html - 32k - Cached - Similar pages

pikdev: pic12C508 class **Reference**
... **Standard** programming algorithms have been developed for: 12 bits devices (see class pic12C508); ... **Special** locations **descriptor** This method returns a list ...
pikdev.free.fr/pikdev-api/ html/d3/d0/classpic12C508.html - 24k - Cached - Similar pages

[PDF] Gain a Real-World Understanding of How Your Applications Will ...
File Format: PDF/Adobe Acrobat
... Currently Volker is an SAP NetWeaver consultant with **special** expertise in SAP Web ...
In addition to the **standard** ejb-jar.xml deployment **descriptor** specified by ...
www.sap.com/mk/get?_EC=jQbu3IRn7Zi1njNga4rDVm - Similar pages

Architecture/JSR-88 - Apache Geronimo Wiki
... are mapped to a set of the **standard** Geronimo XML POJOs for the server-specific deployment **descriptor**, and then ... a String; it needs to be a **special** data type ...
wiki.apache.org/geronimo/Architecture/JSR_2d88 - 16k - Mar 16, 2005 - Cached - Similar pages

concepts
... while you define presentation using **special** JSP tags ... ORB Protocol (IIOP), a **standard** for communication ... declaratively and captured in the deployment **descriptor**. ...
www.oracle.com/technology/sample_code/ tutorials/vsm1.3/over/concepts.htm - 32k - Cached - Similar pages

Write Persistent Modules in Java
... procedures written in Java use **standard** APIs—either ... **Special** system-stored procedures that live in the ... Java code // no deployment **descriptor** sqlj.install_jar ...
www.ftponline.com/javapro/2002_04/ magazine/features/bbeauchemin/default_pf.aspx - 22k - Cached - Similar pages

Nqthm-1992 **Logic** and **Reference** Guide
... readable text of Appendix I among our **standard** example files ... (**Special** action has to be taken to prevent this ... e) where e is an explicit value **descriptor** (see page ...
www.cs.utexas.edu/users/boyer/**logic-reference**.html - 101k - Cached - Similar pages

Enterprise JavaBeans: Java 2 Platform, Enterprise Edition, Part 3
... to be installed inside a **special** application server ... page, servlet, applet, etc.), a **standard** deployment **descriptor** ... to read the deployment **descriptor** and how to ...
www.developer.com/java/ent/article.php/630431 - 56k - Cached - Similar pages

ODLIS: Online Dictionary for Library and Information Science
... century French manuscript (Brigham Young University **Special** Collections ... In the United States, a **standard** section is ... to the preferred heading or **descriptor** for a ...
lu.com/odlis/odlis_s.cfm - 101k - Mar 16, 2005 - Cached - Similar pages

Review: JavaServer Faces | LUV
... **Standard** JSF Components and Render Kits ... API **Reference**; JSF Configuration File **Reference**; and; Web Application Structure and Deployment **Descriptor Reference**. ...
www.luv.asn.au/node/view/188 - 13k - Mar 16, 2005 - Cached - Similar pages

Managing Connections and File **Descriptor** Usage with TPBroker
... Pipe, A **special** type of file used for interprocess ... The following represents file **descriptor** usage for TPBroker processes ... **Standard** server (bank/Server), 22, -1, N/ ...
www.hitachisoftware.com/support/ secure/docs/techtips/manage_conn.html - 19k - Cached - Similar pages

Intro to Paragon/MVC
... on the Model information declared in the part **descriptor**. ... In the page's body, we use **special** tags such ... bean properties is based on the **Standard** Tag Library's ...
www.abaxx.com/elements/docs/ guides/web/users-guide/mvc-0-overview.html - 31k - Cached - Similar pages

library jargon
... A computerized index (or book), having a **standard** format comprising ... A library catalog is a **special** type of database and is ... **descriptor** (see controlled vocabulary ...
www.arches.uga.edu/~pokey/library_jargon.htm - 43k - Cached - Similar pages

CodeGuru: Advanced Run Time Type Identification in C++ : Property ...
... Some **Special** Cases. ... **Standard** containers are handled on the same way. Every instance

of STL containers gets its own Type Info Record and Property **Descriptor**. ...
www.codeguru.com/Cpp/Cpp/ cpp_mfc/rtti/article.php/c4065/ - 101k - Cached - Similar pages

Chapter 17. Expresso Taglib Descriptions
... Also included is the tag library **descriptor**, expresso.tld ... **Special** extensions are available to some tags to ... bean:write ...> to refer to the **standard** Struts "write ...
www.jcorporate.com/expresso/doc/edg/edg_taglib.html - 66k - Cached - Similar pages

[PDF] The Java Portlet Specification and IBM WebSphere Portal
File Format: PDF/Adobe Acrobat - View as HTML
... **Reference** implementation available at Apache, provided by IBM ... (WSRP) – **standard** at OASIS (http://www.oasis.org ... Requires a **special descriptor** file for ...
www.javazone.no/2004/presentasjoner/ OliverKoeth/JavaZone-JSR168.pdf - Similar pages

Programming WebLogic Enterprise JavaBeans
... Read-Only Multicast Invalidation. **Standard** Read-Only Entity Beans. ... Deploying Pinned EJBs - **Special** Step Required. Viewing Deployed EJBs. ... **reference-descriptor**. ...
e-docs.bea.com/wls/docs61/ejb/ - 44k - Cached - Similar pages

Designing and Developing Enterprise JavaBeans for the WLE System
... to the deployment **descriptor** DTD, which is a **special** deployment **descriptor** that you create along with the **standard** deployment **descriptor**. ...
e-docs.bea.com/wle/wle50/getstart/develop.htm - 84k - Cached - Similar pages
[More results from e-docs.bea.com]

[PDF] DEVICE ERRATA 68EN302 INTEGRATED MULTIPROTOCOL PROCESSOR DEVICE
File Format: PDF/Adobe Acrobat - View as HTML
... A **special** set of conditions exists where an extra ... DEF bits in the transmit buffer **descriptor** MAY also be ... counter as defined in the 802.3 **standard**, this counter ...
www.freescale.com/files/ netcomm/doc/errata/MC68EN302DEA1.pdf - Similar pages

Enterprise Bean Environment
... The EJB **reference** is another **special** entry in the enterprise ... its remote home and component interfaces in the **standard** deployment **descriptor** is shown ...
jonas.objectweb.org/current/doc/PG_Environment.html - 13k - Cached - Similar pages

Optimising Concurrent **Logic** Programs: Continuation Compilation
... is (partially) effected by over-loading the **standard** suspension mechanism ... with the variable His updated with a **special reference** to process **descriptor** for pt ...
www.ecs.soton.ac.uk/publications/ rj/1994/decsys/kemp/kemp.html - 18k - Cached - Similar pages

Conceptual Graph **Standard**
... features, however, are outside the scope of this CG **Standard**. ... Referent ::= ": Designator?, **Descriptor**?}. ... A **special** context label is one of five identifiers ...
www.jfsowa.com/cg/cgstandw.htm - 101k - Cached - Similar pages

Gooooooooogle ▶
Result Page: 1 2 3 4 5 6 7 8 9 10 **Next**

Search within results | Language Tools | Search Tips | Dissatisfied? Help us improve

Google Home - Advertising Programs - Business Solutions - About Google

Try our New Full-text Search Prototype GO

Help

1) Enter a single keyword, phrase, or Boolean expression. Example: acoustic imaging (means the phrase acoustic imaging plus any stem variations)
2) Limit your search by using search operators and field codes, if desired.
Example: optical <and> (fiber <or> fibre) <in> ti
3) Limit the results by selecting Search Options.
4) Click Search. See Search Examples

```
(standard <paragraph> special
<paragraph> descriptor
<paragraph> reference
<paragraph> logic)
```

Start Search Clear

Note: This function returns plural and suffixed forms of the keyword(s).

Search operators: <and> <or> <not> <in> More

Field codes: au (author), ti (title), ab (abstract), jn (publication name), de (index term) More

Search Options:

Select publication types:

- [x] IEEE Journals
- [x] IEE Journals
- [x] IEEE Conference proceedings
- [x] IEE Conference proceedings
- [x] IEEE Standards

Select years to search:

From year: All to Present

Organize search results by:

Sort by: Relevance
In: Descending order

List 15 Results per page

Your search matched **0** of **1138071** documents.
A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance** in **Descending** order.

Refine This Search:
You may refine your search by editing the current search expression or entering a new one in the text box.

(standard <paragraph> special <paragraph> descripto Search

☐ Check to search within this result set

Results Key:
JNL = Journal or Magazine **CNF** = Conference **STD** = Standard

---

Results:
No documents matched your query.

Your search matched **1** of **1138071** documents.
A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance** in **Descending** order.

Refine This Search:

You may refine your search by editing the current search expression or entering a new one in the text box.

standard <paragraph> special <paragraph> descriptor Search

Check to search within this result set

Results Key:

JNL = Journal or Magazine **CNF** = Conference **STD** = Standard

1 **An analysis of the effects of jitter in data acquisition on synchronous averaging**

Sun, M.; Bonaddio, D.L.; Mi, J.; Sclabassi, R.J.;

Systems, Man and Cybernetics, IEEE Transactions on , Volume: 21 , Issue: 2 , March-April 1991

Pages:456 - 463

[Abstract] [PDF Full-Text (572 KB)] **IEEE JNL**

Terms used **standard special descriptor reference logic** Found **4,234** of **151,219**

Sort results by relevance

Display results expanded form

Save results to a Binder

Search Tips

Open results in a new window

Try an Advanced Search

Try this search in The ACM Guide

Results 1 - 20 of 200 Result page: **1** 2 3 4 5 6 7 8 9 10 next

Best 200 shown Relevance scale

1 Status report of the graphic standards planning committee of ACM/SIGGRAPH: State-of-the-art of graphic software packages

Compuater Graphics staff

September 1977 **ACM SIGGRAPH Computer Graphics**, Volume 11 Issue 3

Full text available: pdf(9.03 MB) Additional Information: full citation, references

2 FORTRAN vs. Basic FORTRAN: a programming language for informational processing on automatic data processing systems

October 1964 **Communications of the ACM**, Volume 7 Issue 10

Full text available: pdf(3.90 MB) Additional Information: full citation

3 Clarification of Fortran standards---second report

C. Kerpelman

October 1971 **Communications of the ACM**, Volume 14 Issue 10

Full text available: pdf(1.84 MB) Additional Information: full citation, abstract, references, citings

In 1966, after four years of effort, Fortran became the first programming language standardized in the United States. Since that initial achievement, study and application of the standard specifications have revealed the need for maintenance of the standards. As the result of work initiated in 1967, an initial set of clarifying interpretations was prepared and this clarification was published in Communications of the ACM in May 1969. That work has continued and has resulted in the preparati ...

Keywords: American National Standard, Basic Fortran, Fortran, language standard clarification, language standard interpretation, language standard maintenance, language standard specification, programming language, standardization, standardization committee

4 Status report of the graphic standards planning committee

Computer Graphics staff

August 1979 **ACM SIGGRAPH Computer Graphics**, Volume 13 Issue 3

Full text available: pdf(15.01 MB) Additional Information: full citation, references, citings

5 4.2BSD and 4.3BSD as examples of the UNIX system

John S. Quarterman, Abraham Silberschatz, James L. Peterson
December 1985 **ACM Computing Surveys (CSUR)**, Volume 17 Issue 4

Full text available: pdf(4.07 MB) Additional Information: full citation, abstract, references, citings, index terms, review

This paper presents an in-depth examination of the 4.2 Berkeley Software Distribution, Virtual VAX-11 Version (4.2BSD), which is a version of the UNIX Time-Sharing System. There are notes throughout on 4.3BSD, the forthcoming system from the University of California at Berkeley. We trace the historical development of the UNIX system from its conception in 1969 until today, and describe the design principles that have guided this development. We then present the internal data structures and ...

6 The family of concurrent logic programming languages
Ehud Shapiro
September 1989 **ACM Computing Surveys (CSUR)**, Volume 21 Issue 3

Full text available: pdf(9.62 MB) Additional Information: full citation, abstract, references, citings, index terms

Concurrent logic languages are high-level programming languages for parallel and distributed systems that offer a wide range of both known and novel concurrent programming techniques. Being logic programming languages, they preserve many advantages of the abstract logic programming model, including the logical reading of programs and computations, the convenience of representing data structures with logical terms and manipulating them using unification, and the amenability to metaprogrammin ...

7 A card format for reference files in information processing
Mandalay Grems
February 1961 **Communications of the ACM**, Volume 4 Issue 2

Full text available: pdf(773.66 KB) Additional Information: full citation, abstract, references, citings, index terms

This paper proposes a card format suitable for a variety of reference files in information processing. An 80-column IBM card is divided into two fields—reference material field (columns 1-67) and identification field (columns 68-80). The format for the reference material is flexible, while the format for the identification is rigid. The reference material includes basically an index, title, source, class, summary and cross reference for each entry. The identification includes basicall ...

8 Curriculum 68: Recommendations for academic programs in computer science: a report of the ACM curriculum committee on computer science
William F. Atchison, Samuel D. Conte, John W. Hamblen, Thomas E. Hull, Thomas A. Keenan, William B. Kehl, Edward J. McCluskey, Silvio O. Navarro, Werner C. Rheinboldt, Earl J. Schweppe, William Viavant, David M. Young
March 1968 **Communications of the ACM**, Volume 11 Issue 3

Full text available: pdf(6.63 MB) Additional Information: full citation, references, citings

Keywords: computer science academic programs, computer science bibliographies, computer science courses, computer science curriculum, computer science education, computer science graduate programs, computer science undergraduate programs

9 I/O reference behavior of production database workloads and the TPC benchmarks—an analysis at the logical level
Windsor W. Hsu, Alan Jay Smith, Honesty C. Young
March 2001 **ACM Transactions on Database Systems (TODS)**, Volume 26 Issue 1

Full text available: pdf(5.42 MB) Additional Information: full citation, abstract, references, index terms

As improvements in processor performance continue to far outpace improvements in

storage performance, I/O is increasingly the bottleneck in computer systems, especially in large database systems that manage huge amoungs of data. The key to achieving good I/O performance is to thoroughly understand its characteristics. In this article we present a comprehensive analysis of the logical I/O reference behavior of the peak productiondatabase workloads from ten of the world's largest corporatio ...

Keywords: I/O, TPC benchmarks, caching, locality, prefetching, production database workloads, reference behavior, sequentiality, workload characterization

10 Query evaluation techniques for large databases 

Goetz Graefe

June 1993 **ACM Computing Surveys (CSUR)**, Volume 25 Issue 2

Full text available: pdf(9.37 MB) Additional Information: full citation, abstract, references, citings, index terms, review

Database management systems will continue to manage large data volumes. Thus, efficient algorithms for accessing and manipulating large sets and sequences will be required to provide acceptable performance. The advent of object-oriented and extensible database systems will not solve this problem. On the contrary, modern data models exacerbate the problem: In order to manipulate large sets of complex objects as efficiently as today's database systems manipulate simple records, query-processi ...

Keywords: complex query evaluation plans, dynamic query evaluation plans, extensible database systems, iterators, object-oriented database systems, operator model of parallelization, parallel algorithms, relational database systems, set-matching algorithms, sort-hash duality

11 Understanding the global semantics of referential actions using logic rules 

Wolfgang May, Bertram Ludäscher

December 2002 **ACM Transactions on Database Systems (TODS)**, Volume 27 Issue 4

Full text available: pdf(640.93 KB) Additional Information: full citation, abstract, references, index terms

Referential actions are specialized triggers for automatically maintaining referential integrity in databases. While the *local effects* of referential actions can be grasped easily, it is far from obvious what the *global semantics* of a set of interacting referential actions should be. In particular, when using procedural execution models, ambiguities due to the execution ordering can occur. No *global, declarative* semantics of referential actions has yet been defined.We show t ...

Keywords: Database theory, game theory, logic programming, referential actions, referential integrity, relational databases

12 Attribute grammar paradigms—a high-level methodology in language implementation 

Jukka Paakki

June 1995 **ACM Computing Surveys (CSUR)**, Volume 27 Issue 2

Full text available: pdf(5.15 MB) Additional Information: full citation, abstract, references, citings, index terms, review

Attribute grammars are a formalism for specifying programming languages. They have been applied to a great number of systems automatically producing language implementations from their specifications. The systems and their specification languages can be evaluated and classified according to their level of application support, linguistic characteristics, and degree of automation.A survey of attribute grammar-based specification languages is given. The modern advanced specification ...

Keywords: attribute grammars, blocks, classes, compiler writing systems, functional dependencies, incomplete data, incrementality, inheritance, language processing, language

processor generators, lazy evaluation, logical variables, objects, parallelism, processes, programming paradigms, semantic functions, symbol tables, unification

13 Toward a logical/physical theory of spreadsheet modeling
Tomás Isakowitz, Shimon Schocken, Henry C. Lucas
January 1995 **ACM Transactions on Information Systems (TOIS)**, Volume 13 Issue 1

Full text available: pdf(2.76 MB) Additional Information: full citation, abstract, references, citings, index terms, review

In spite of the increasing sophistication and power of commercial spreadsheet packages, we still lack a formal theory or a methodology to support the construction and maintenance of spreadsheet models. Using a dual logical/physical perspective, we identify four principal components that characterize any spread sheet model: schema, data, editorial, and binding. We present a factoring algorithm for identifying and extracting these components ...

Keywords: model management

14 Logical, internal, and physical reference behavior in CODASYL database systems
Wolfgang Effelsberg, Mary E. S. Loomis
June 1984 **ACM Transactions on Database Systems (TODS)**, Volume 9 Issue 2

Full text available: pdf(1.77 MB) Additional Information: full citation, abstract, references, citings, index terms, review

This work investigates one aspect of the performance of CODASYL database systems: the data reference behavior. We introduce a model of database traversals at three levels: the logical, internal, and physical levels. The mapping between the logical and internal levels is defined by the internal schema, whereas the mapping between the internal and the physical levels depends on cluster properties of the database. Our model explains the physical reference behavior for a given sequence of DML s ...

15 Parallel execution of prolog programs: a survey
Gopal Gupta, Enrico Pontelli, Khayri A.M. Ali, Mats Carlsson, Manuel V. Hermenegildo
July 2001 **ACM Transactions on Programming Languages and Systems (TOPLAS)**, Volume 23 Issue 4

Full text available: pdf(1.95 MB) Additional Information: full citation, abstract, references, citings, index terms

Since the early days of logic programming, researchers in the field realized the potential for exploitation of parallelism present in the execution of logic programs. Their high-level nature, the presence of nondeterminism, and their referential transparency, among other characteristics, make logic programs interesting candidates for obtaining speedups through parallel execution. At the same time, the fact that the typical applications of logic programming frequently involve irregular computatio ...

Keywords: Automatic parallelization, constraint programming, logic programming, parallelism, prolog

16 Human-computer interface development: concepts and systems for its management
H. Rex Hartson, Deborah Hix
March 1989 **ACM Computing Surveys (CSUR)**, Volume 21 Issue 1

Full text available: pdf(7.97 MB) Additional Information: full citation, abstract, references, citings, index terms, review

Human-computer interface management, from a computer science viewpoint, focuses on the process of developing quality human-computer interfaces, including their representation, design, implementation, execution, evaluation, and maintenance. This

survey presents important concepts of interface management: dialogue independence, structural modeling, representation, interactive tools, rapid prototyping, development methodologies, and control structures. *Dialogue independence* is th ...

17 Special issue on persistent object systems: Adaptable pointer swizzling strategies in object bases: design, realization, and quantitative analysis

Alfons Kemper, Donald Kossmann

July 1995 **The VLDB Journal — The International Journal on Very Large Data Bases**, Volume 4 Issue 3

Full text available: pdf(2.69 MB) Additional Information: full citation, abstract, references, citings

In this article, different techniques for *"pointer swizzling"* are classified and evaluated for optimizing the access to main-memory resident persistent objects. To speed up the access along inter-object references, the persistent pointers in the form of unique object identifiers (OIDs) are transformed (swizzled) into main-memory pointers (addresses). Pointer swizzling techniques can be divided into two classes: (1) those that allow replacement of swizzled objects from the buffer before th ...

Keywords: object-oriented database systems, performance evaluation, pointer swizzling

18 Distributed file systems: concepts and examples

Eliezer Levy, Abraham Silberschatz

December 1990 **ACM Computing Surveys (CSUR)**, Volume 22 Issue 4

Full text available: pdf(5.33 MB) Additional Information: full citation, abstract, references, citings, index terms, review

The purpose of a distributed file system (DFS) is to allow users of physically distributed computers to share data and storage resources by using a common file system. A typical configuration for a DFS is a collection of workstations and mainframes connected by a local area network (LAN). A DFS is implemented as part of the operating system of each of the connected computers. This paper establishes a viewpoint that emphasizes the dispersed structure and decentralization of both data and con ...

19 Business-to-business interactions: issues and enabling technologies

B. Medjahed, B. Benatallah, A. Bouguettaya, A. H. H. Ngu, A. K. Elmagarmid

May 2003 **The VLDB Journal — The International Journal on Very Large Data Bases**, Volume 12 Issue 1

Full text available: pdf(558.34 KB) Additional Information: full citation, abstract, index terms

Business-to-Business (B2B) technologies pre-date the Web. They have existed for at least as long as the Internet. B2B applications were among the first to take advantage of advances in computer networking. The Electronic Data Interchange (EDI) business standard is an illustration of such an early adoption of the advances in computer networking. The ubiquity and the affordability of the Web has made it possible for the masses of businesses to automate their B2B interactions. However, several issu ...

Keywords: B2B Interactions, Components, E-commerce, EDI, Web services, Workflows, XML

20 Compile-time memory reuse in logic programming languages through update in place

Gudjón Gudjónsson, William H. Winsborough

May 1999 **ACM Transactions on Programming Languages and Systems (TOPLAS)**, Volume 21 Issue 3

Full text available: pdf(693.38 KB) Additional Information: full citation, abstract, references, index terms

Standard implementation techniques for single-assignment languages modify a data structure without destroying the original, which may subsequently be accessed. Instead a variant structure is created by using newly allocated cells to represent the changed portion and to replace any cell that references a newly allocated cell. The rest of the original

structure is shared by the variant. The effort required to leave the original uncorrupted is unnecessary when the program will never reference ...

Keywords: Prolog, compile-time garbage collection, local reuse, reuse map, update in place

Results 1 - 20 of 200 Result page: **1** 2 3 4 5 6 7 8 9 10 next

File 347:JAPIO Nov 1976-2004/Nov(Updated 050309)
(c) 2005 JPO & JAPIO
File 350:Derwent WPIX 1963-2005/UD,UM &UP=200517
(c) 2005 Thomson Derwent

Set	Items	Description
S1	132733	DATABASE? ? OR DATA()(BASE OR BASES) OR REPOSITOR??? OR (INFORMATION OR DATA)()MANAGEMENT()SYSTEM? ?
S2	9801	QUERY OR QUERIES OR SEARCH(1W)(EXPRESSION? ? OR STATEMENT? ? OR PHRASE? ? OR STRING? ? OR PARAMETER? ? OR PLAN OR PLANS OR STRUCTURE? ? OR CRITERIA OR CRITERION)
S3	429	(GENERIC OR STANDARD OR REGULAR OR GENERAL OR GLOBAL OR UNIVERSAL OR COMMON OR BROAD OR NONSPECIFIC OR NON()SPECIFIC OR UNIFORM)(2W)(DESCRIPTOR? ? OR DESCRIPTER? ? OR METADATA OR META()DATA OR DESCRIB??? OR SYNTAX)
S4	751	(GENERIC OR STANDARD OR REGULAR OR GENERAL OR GLOBAL OR UNIVERSAL OR COMMON OR BROAD OR NONSPECIFIC OR NON()SPECIFIC OR UNIFORM)(2W)(SEMANTIC? ? OR REPRESENT?)
S5	1167	(SPECIAL? OR SPECIFIC OR PROPRIETARY OR INHERENT)(2W)(DESCRIPTOR? ? OR DESCRIPTER? ? OR METADATA OR META()DATA OR DESCRIB??? OR SYNTAX OR SEMANTIC? ? OR REPRESENT?)
S6	1	S3:S4(5N)S5(5N)(DERIV??? OR MAP???? OR REFER??? OR REFERENC??? OR CORRELAT? OR CORRESPOND? OR ASSOCIAT? OR MATCH??? OR RELATE? ? OR RELATING)
S7	30067	(DESCRIPT? OR METADATA OR META()DATA OR DESCRIB??? OR SYNTAX OR SEMANTIC? ? OR REPRESENT?)(5N)(CODE? ? OR CODING OR ALGORITHM? ? OR LOGIC OR PROGRAM? ? OR OBJECT? ?)
S8	113116	(DERIV??? OR MAP???? OR REFER??? OR REFERENC??? OR CORRELAT? OR CORRESPOND? OR ASSOCIAT? OR MATCH??? OR RELATE? ? OR RELATING)(5N)(CODE? ? OR CODING OR ALGORITHM? ? OR LOGIC OR PROGRAM? ? OR OBJECT? ?)
S9	95	REFERENCE(1W)LOGIC
S10	1	S1 AND S2 AND S3:S4 AND S5
S11	2	S6 OR S10
S12	0	S1 AND S2 AND S9
S13	16	S1 AND S2 AND S3:S5
S14	17	S10:S13

14/5/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

016290152 **Image available**
WPI Acc No: 2004-448047/200442
XRPX Acc No: N04-354367
Time-based query performance method in computer system, involves applying time-based query comprising time and date information, to data stored in uni-temporal database and corresponding result is output
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: MEGERIAN M G
Number of Countries: 105 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20040103084	A1	20040527	US 2002301128	A	20021121	200442	B
WO 200449211	A1	20040610	WO 2003US31959	A	20031009	200442	
AU 2003282509	A1	20040618	AU 2003282509	A	20031009	200471	

Priority Applications (No Type Date): US 2002301128 A 20021121
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20040103084	A1		16	G06F-017/30	
WO 200449211	A1	E		G06F-017/30	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW
Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

AU 2003282509	A1		G06F-017/30	Based on patent WO 200449211

Abstract (Basic): US 20040103084 A1
NOVELTY - The time-based **query** comprising time and date information, is received. The received **query** is applied to data stored in uni-temporal **database** and the result containing time-**specific representation** of data is returned.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) program product for performing time-based **query** ;
(2) apparatus for performing time-based **query** .
USE - For performing time-based **query** using uni-temporal **data management system** in computer system.
ADVANTAGE - Enables efficient data acquisition according to time and date, from the uni-temporal **database** .
DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of computer system.
temporary table (215)
pp; 16 DwgNo 2/7
Title Terms: TIME; BASED; **QUERY** ; PERFORMANCE; METHOD; COMPUTER; SYSTEM; APPLY; TIME; BASED; **QUERY** ; COMPRISE; TIME; DATE; INFORMATION; DATA; STORAGE; UNI; TEMPORAL; **DATABASE** ; CORRESPOND; RESULT; OUTPUT
Derwent Class: T01
International Patent Class (Main): G06F-017/30
File Segment: EPI

14/5/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX

016252081 **Image available**
WPI Acc No: 2004-409975/200438
XRPX Acc No: N04-325579
Clinical data collecting/distributing method for data mining, involves transmitting common format report to data mining host system with data

repository , **after replacing local clinical code with common format clinical code**
Patent Assignee: GE MED SYS INFORMATION TECH (GENE); GE MEDICAL SYSTEMS INFORMATION TECHNOLOG (GENE); ANAND V J (ANAN-I); BRACKETT C (BRAC-I)
Inventor: ANAND V J; BRACKETT C
Number of Countries: 033 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20040083217	A1	20040429	US 200265504	A	20021025	200438	B
EP 1420355	A2	20040519	EP 2003256678	A	20031023	200438	
CN 1501290	A	20040602	CN 20031120330	A	20031024	200465	
US 6826578	B2	20041130	US 200265504	A	20021025	200479	

Priority Applications (No Type Date): US 200265504 A 20021025
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20040083217	A1		10	G06F-017/00	
EP 1420355	A2	E		G06F-019/00	
	Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR				
CN 1501290	A			G06F-017/40	
US 6826578	B2			G06F-017/30	

Abstract (Basic): US 20040083217 A1
NOVELTY - A **database** which stores local clinical code and corresponding common format clinical code, is accessed and the local clinical code is replaced with corresponding common format clinical code. The common format report is transmitted to a data mining host system (104) which includes a data **repository** .
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) system for collecting and distributing clinical data; and
(2) computer program for collecting and distributing clinical data.
USE - For collecting and distributing coded clinical data which is generated in different hospitals using different clinical data codes and formats, used for data mining.
ADVANTAGE - Enables to map clinical reports into a **common representation** and provides the ability to **query** or mine data generated by different clinics and hospitals in a consistent manner. Also provides patterns that are useful for researchers and clinicians.
DESCRIPTION OF DRAWING(S) - The figure shows a schematic view of the system for collecting and distributing clinical data.
user system (102)
data mining host system (104)
network (106)
storage device (108)
hospital computer system (110)
pp; 10 DwgNo 1/3
Title Terms: CLINICAL; DATA; COLLECT; DISTRIBUTE; METHOD; DATA; MINE; TRANSMIT; COMMON; FORMAT; REPORT; DATA; MINE; HOST; SYSTEM; DATA; **REPOSITORY** ; AFTER; REPLACE; LOCAL; CLINICAL; CODE; COMMON; FORMAT; CLINICAL; CODE
Derwent Class: S05; T01
International Patent Class (Main): G06F-017/00; G06F-017/30; G06F-017/40; G06F-019/00
International Patent Class (Additional): G06F-017/30
File Segment: EPI

14/5/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX

015692555 **Image available**
WPI Acc No: 2003-754744/200371
Related WPI Acc No: 2002-081656; 2003-896322
XRPX Acc No: N03-604704
Hybrid database **system for multimedia data, has table for storing**

extensions for object, having object identifications and attributes associated with respective object

Patent Assignee: SILICON GRAPHICS INC (SILI-N)
Inventor: MENON S
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6615204	B1	20030902	US 96644686	A	19960531	200371 B
			US 2000541531	A	20000403	

Priority Applications (No Type Date): US 2000541531 A 20000403; US 96644686 A 19960531
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6615204	B1		32	G06F-017/30	CIP of application US 96644686

Abstract (Basic): US 6615204 B1

NOVELTY - A fixed mapped table has used tables comprising identification (ID) of objects with respective asset type. A table (102) for storing extension for the objects, has tables for each asset type comprising associated object IDs and attributes. The attribute **specific metadata** tables (1106a-n) stores object IDs with respective attributes. A program interface automatically relates the objects in the fixed mapped table to the respective extensions through stored object IDs.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for method for mapping objects into a **database** storage.

USE - For mapping data objects e.g. multimedia data comprising voice and video e.g. animation film, computer animation film, video game, interactive movies, news clips, educational multimedia products, corporate multimedia productions, multimedia sales catalogs, still video image analog and/or off line recordings, paper drawings, video clip, scanned incline drawings, inked and printed drawings back ground, color model, inspirational artwork, three-dimensional model, X sheets and production spreadsheet created during process of multimedia productions within **database** storage in shared multimedia environment such as asset management system.

ADVANTAGE - Mapping is efficient. Since the extensions capture the changes and updates to objects over their life times. Hence, schema evolution problems and costs associated with the extending objects are avoided. Fixed mapping minimizes processing overhead for accessing the objects that do not change over their life times. This provides high speed **database** performance and high flexibility during storage, retrieval and **query** operations and minimizes processing penalty paid for accessing extensions. Storage space is utilized efficiently.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the hybrid **database** system.

asset table (1102)
entries (1104a-n,1108a-n)
meta data tables (1106a-n)
pp; 32 DwgNo 11/14

Title Terms: HYBRID; **DATABASE** ; SYSTEM; DATA; TABLE; STORAGE; EXTEND; OBJECT; OBJECT; IDENTIFY; ATTRIBUTE; ASSOCIATE; RESPECTIVE; OBJECT
Derwent Class: T01
International Patent Class (Main): G06F-017/30
File Segment: EPI

14/5/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

015657712 **Image available**
WPI Acc No: 2003-719897/200368
XRPX Acc No: N03-575457

Clustered task model usage method for generating recipe card, involves rendering script or query related to task cluster associated with minimum dissimilarity between partial and clustered tasks, to accomplish/complete task

Patent Assignee: MICROSOFT CORP (MICT)
Inventor: ALTSCHULER S J; INGERMAN D; JUNG E K; RIDGEWAY G; WU L F
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6606613	B1	20030812	US 99325168	A	19990603	200368	B

Priority Applications (No Type Date): US 99325168 A 19990603
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6606613	B1		71	G06N-003/02	

Abstract (Basic): US 6606613 B1

NOVELTY - The method involves generating a partial task from a logged input of an user. When the dissimilarity between the generated partial tasks and the clustered similar tasks is minimum, related script or **query** for accomplishing/completing the partial task is rendered to the user.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) clustered task model using apparatus; and

(2) machine readable medium storing clustered task model usage program.

USE - For using clustered task model in computer e.g. word processing applications used to generate letter, food recipe card, table of contents for paper, and spreadsheet application used to determine accounts receivable value or taxable income value, and drafting application used to generate organizational chart, prepare block diagram or layout floor plan for a new kitchen, and **database** or Internet browser application used to find crash test results for new cars, get stock quote, find employee's telephone extension, provide movie advertisements and restaurant information resources.

ADVANTAGE - Allows users to perform tasks more effectively and efficiently. Provides **uniform semantic** network for representing different types of objects or information in a uniform way.

DESCRIPTION OF DRAWING(S) - The figure shows the schematic view of the clustered task model using system.

pp; 71 DwgNo 3A/45

Title Terms: CLUSTER; TASK; MODEL; METHOD; GENERATE; RECIPE; CARD; RENDER; SCRIPT; **QUERY** ; RELATED; TASK; CLUSTER; ASSOCIATE; MINIMUM; CLUSTER; TASK; ACCOMPLISH; COMPLETE; TASK
Derwent Class: T01
International Patent Class (Main): G06N-003/02
File Segment: EPI

14/5/5 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX

015600070 **Image available**
WPI Acc No: 2003-662225/200362
Related WPI Acc No: 2003-492583
XRPX Acc No: N03-528489

Information retrieval system, has search engines producing common **mathematical** representation **of each retrieved document and visualization display unit to map respective mathematical representation onto display**

Patent Assignee: HARRIS CORP (HARO)
Inventor: CUSICK G J; FOX K L; FRIEDER O; KILLAM R A; KNEPPER M M; NEMETHY J M; SNOWBERG E J
Number of Countries: 001 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20030130998	A1	20030710	US 98195773	A	19981118	200362	B
			US 2003356958	A	20030203		
US 6701318	B2	20040302	US 98195773	A	19981118	200417	
			US 2003356958	A	20030203		

Priority Applications (No Type Date): US 98195773 A 19981118; US 2003356958 A 20030203
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20030130998	A1		32	G06F-007/00	Div ex application US 98195773
US 6701318	B2			G06F-017/30	Div ex application US 98195773

Abstract (Basic): US 20030130998 A1

NOVELTY - The system (10) has an input interface (12) to accept a user search **query** and many search engines (14) to retrieve documents from a **database** based on search **query** . The search engine produces a **common** mathematical **representation** of each retrieved document. A visualization display unit (24) is provided to map respective mathematical representation onto a display.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method for selectively retrieving documents from a document **database** using an information retrieval system.

USE - Used for searching and retrieving data from collection of documents in response to user input **queries** over the Internet.

ADVANTAGE - The search engines provide a quicker and an efficient way to search large document collection and present the results in a meaningful manner to the user. The system allows for efficient maintenance i.e., making it easier to add new documents, and allows for interactive formation of **query** refinement.

DESCRIPTION OF DRAWING(S) - The drawing shows a block diagram of the information retrieval and visualization system.

Information retrieval system (10)
Input interface (12)
Search engines (14)
Visualization display unit. (24)
pp; 32 DwgNo 1/16

Title Terms: INFORMATION; RETRIEVAL; SYSTEM; SEARCH; ENGINE; PRODUCE; COMMON; MATHEMATICAL; REPRESENT; RETRIEVAL; DOCUMENT; DISPLAY; UNIT; MAP; RESPECTIVE; MATHEMATICAL; REPRESENT; DISPLAY
Derwent Class: T01
International Patent Class (Main): G06F-007/00; G06F-017/30
File Segment: EPI

14/5/6 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX

015005902 **Image available**
WPI Acc No: 2003-066419/200306
XRPX Acc No: N03-051480

Transparent caching and query **execution plan reusage method for** database **management, involves determining match between new** query **and old** query **for which execution plan has been already generated**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: ATTALURI G K; WISNESKI D J
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6466931	B1	20021015	US 99364755	A	19990730	200306	B

Priority Applications (No Type Date): US 99364755 A 19990730
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6466931	B1		8	G06F-017/30	

Abstract (Basic): US 6466931 B1

NOVELTY - A **query** containing a **specific** constant **represented** by a parameter name and for which an execution plan has been generated, is cached. A new **query** containing another constant is received. Signatures are generated for both the **queries** , so as to determine a match between them even if their constants differ. The already

generated execution plan is reused by substituting the parameter name if the **queries** match.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) Transparent caching and **query** execution plan reusage system; and

(2) Computer readable medium storing transparent caching and **query** execution plan reusage program.

USE - For caching transparently and for reusing **database** **query** execution plan for **database** management in object-oriented relational **database** environment.

ADVANTAGE - Increases system speed, by avoiding the generation of a new **query** execution plan for a new **query** if an already generated plan is reusable, based on a flexible matching condition.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the operating environment.

pp; 8 DwgNo 1/3

Title Terms: TRANSPARENT; **QUERY** ; EXECUTE; PLAN; METHOD; **DATABASE** ; MANAGEMENT; DETERMINE; MATCH; NEW; **QUERY** ; **QUERY** ; EXECUTE; PLAN; GENERATE

Derwent Class: T01; U14

International Patent Class (Main): G06F-017/30

File Segment: EPI

14/5/8 (Item 8 from file: 350)

DIALOG(R)File 350:Derwent WPIX

014394694 **Image available**

WPI Acc No: 2002-215397/200227

Related WPI Acc No: 2001-495944

XRPX Acc No: N02-164958

Query **execution for computer implemented** database **management system, involves transmitting data with large non-** standard **data types,** represented **by placeholders in answer set, to client computer after sending answer set**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: DONG M A; PICKEL J W

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20010023420	A1	20010920	US 98160011	A	19980924	200227	B
			US 2001836078	A	20010416		
US 6487551	B2	20021126	US 98160011	A	19980924	200281	
			US 2001836078	A	20010416		

Priority Applications (No Type Date): US 2001836078 A 20010416; US 98160011 A 19980924

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20010023420	A1		16	G06F-017/30	CIP of application US 98160011
					CIP of patent US 6256626
US 6487551	B2			G06F-017/30	CIP of application US 98160011
					CIP of patent US 6256626

Abstract (Basic): US 20010023420 A1

NOVELTY - An answer set comprising data having standard data type, small non-standard data type and placeholder representing data having large non-standard data type, is generated, using data retrieved from a **database** (114) at a server computer (110) and transmitted to a client computer (102). The data represented by the placeholder is then transmitted to the client computer.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(a) **Query** execution apparatus;

(b) Article of manufacture comprising computer readable medium storing **query** execution program

USE - For computer implemented **database** management system for **database** used in multimedia applications in world wide web, medicare applications, geographical, space and exploration systems.

ADVANTAGE - Data having very large data objects are efficiently transmitted and received in a client-server environment. The data having very large data objects are externalized from data having standard data types and small data objects, thereby allowing processing of data having small data objects to preform the same as standard data types. The client computer can receive and process the base data objects, as they are easily understood.

DESCRIPTION OF DRAWING(S) - The figure shows the client-server configuration.

Client computer (102)

Server computer (110)

Database (114)

pp; 16 DwgNo 1/5

Title Terms: **QUERY** ; EXECUTE; COMPUTER; IMPLEMENT; **DATABASE** ; MANAGEMENT; SYSTEM; TRANSMIT; DATA; NON; STANDARD; DATA; TYPE; REPRESENT; ANSWER; SET ; CLIENT; COMPUTER; AFTER; SEND; ANSWER; SET

Derwent Class: T01

International Patent Class (Main): G06F-017/30

International Patent Class (Additional): G06F-015/00

File Segment: EPI

14/5/9 (Item 9 from file: 350)

DIALOG(R)File 350:Derwent WPIX

014241202 **Image available**

WPI Acc No: 2002-061902/200208

XRPX Acc No: N02-045985

Resource creation method in a distributed computing environment, each set of resources being associated with a respective representation

Patent Assignee: BRITISH TELECOM PLC (BRTE); GEORGALAS N (GEOR-I)

Inventor: GEORGALAS N

Number of Countries: 096 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200175589	A2	20011011	WO 2001GB1281	A	20010323	200208	B
AU 200139424	A	20011015	AU 200139424	A	20010323	200209	
EP 1311943	A2	20030521	EP 2001914036	A	20010323	200334	
			WO 2001GB1281	A	20010323		
US 20030112232	A1	20030619	WO 2001GB1281	A	20010323	200341	
			US 2002239708	A	20020925		

Priority Applications (No Type Date): EP 2000302757 A 20000331

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200175589	A2	E	54	G06F-009/00	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

AU 200139424	A		G06F-009/00	Based on patent WO 200175589
EP 1311943	A2	E	G06F-009/00	Based on patent WO 200175589

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

US 20030112232	A1		G06T-001/00	

Abstract (Basic): WO 200175589 A2

NOVELTY - Each set of resources is associated with a respective representation which is transformed into a **common representation** and a store is populated with the **common representation** of each set of resources to permit the rule-based association of component ones of the resources in their **common representation** to define a new

resource and create a new resource.
DETAILED DESCRIPTION - An independent claim is also included for (1) A program storage medium containing computer readable code. (2) An apparatus for resource creation
USE - All sources are integrated into one source, with resultant integrated **query** functionality. Techniques such as the federation of **databases** , data warehousing and mediator systems have been deployed.
ADVANTAGE - The transformation to a **common** resource **representation** allows specification of complex functionality for new system resources.
DESCRIPTION OF DRAWING(S) - The figure illustrates an apparatus for resource creation in a distributed computing environment.
pp; 54 DwgNo 2/10
Title Terms: RESOURCE; CREATION; METHOD; DISTRIBUTE; COMPUTATION; ENVIRONMENT; SET; RESOURCE; ASSOCIATE; RESPECTIVE; REPRESENT
Derwent Class: T01
International Patent Class (Main): G06F-009/00; G06T-001/00
File Segment: EPI

14/5/11 (Item 11 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013966294
WPI Acc No: 2001-450508/200148
XRPX Acc No: N01-333425
Object orientated database query **model for computer** databases **using object orientated program modules to translate user input into a compound** database query **applied to one or more** databases
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: CODEN A R; MACK R L
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6263328	B1	20010717	US 99289017	A	19990409	200148	B

Priority Applications (No Type Date): US 99289017 A 19990409
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6263328	B1		59	G06F-017/30	

Abstract (Basic): US 6263328 B1
NOVELTY - The Graphical User Interface (GUI) has user selectable **query** elements with operators independent of the **database** . Each element is entered as a variable to the **Query** Object of the same type. The associated operators form the Operator objects. The Compound **Query** Object uses the **Query** Objects and the Operator Objects to create a **query** expression for the specific **database** .
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a computer system and program to perform **database queries** using the object orientated method.
USE - To perform searches of computerized **databases** e.g. IBM's DB2.
ADVANTAGE - The final **database query** expression syntax is independent of the **query** element and operator as it depends on the Compound **Query** Object to translate into the **specific database syntax** . Thus different GUI's or **databases** can be used with minimal changes to the application. The final **query** expression combines the **query** elements and operands producing a single set results as opposed to multiple sets resulting from applying the **query** elements separately.
pp; 59 DwgNo 0/23
Title Terms: OBJECT; ORIENT; **DATABASE** ; **QUERY** ; MODEL; COMPUTER; OBJECT; ORIENT; PROGRAM; MODULE; TRANSLATION; USER; INPUT; COMPOUND; **DATABASE** ; **QUERY** ; APPLY; ONE; MORE
Derwent Class: T01
International Patent Class (Main): G06F-017/30

File Segment: EPI

14/5/13 (Item 13 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013501488 **Image available**
WPI Acc No: 2000-673429/200066
XRPX Acc No: N00-499173
Processing data as query information involves comparing original and alternative data files with data in connected database , outputting coinciding data to local data processing machine
Patent Assignee: KAROLUS L H (KARO-I)
Inventor: KAROLUS L H
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
DE 19907341	A1	20000831	DE 1007341	A	19990220	200066	B

Priority Applications (No Type Date): DE 1007341 A 19990220
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 19907341	A1		18	G06F-017/30	

Abstract (Basic): DE 19907341 A1
NOVELTY - The method involves automatically searching the locally generated data file for outstanding characters and/or character sequences; transforming the outstanding characters into other characters and/or sequences according to predefined parameters; combining the transformed characters and/or sequences with to form new (alternative) data files; comparing the original and alternative data files with data in a connected **database** ; and outputting the coinciding data to the local machine.
USE - For processing and converting data generated by a client and transmitted to a server as **query** information for a **database query** .
ADVANTAGE - Enables **queries** to be processed and transformed so that different notations and the related terminals if appropriate can be detected in the server, thus enabling most meanings and notations to be covered and a substantially complete search result to be achieved.
DESCRIPTION OF DRAWING(S) - The drawing shows a **general** flow diagram **representation** of the process of processing data as **query** information.
pp; 18 DwgNo 1/2
Title Terms: PROCESS; DATA; **QUERY** ; INFORMATION; COMPARE; ORIGINAL; ALTERNATIVE; DATA; FILE; DATA; CONNECT; **DATABASE** ; OUTPUT; COINCIDE; DATA; LOCAL; DATA; PROCESS; MACHINE
Derwent Class: T01
International Patent Class (Main): G06F-017/30
File Segment: EPI

14/5/15 (Item 15 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012827275 **Image available**
WPI Acc No: 1999-633507/199954
XRPX Acc No: N99-467802
Text based document searching method in database of internet
Patent Assignee: DIALECT CORP (DIAL-N); WORDSTREAM INC (WORD-N)
Inventor: CHRISTY S
Number of Countries: 075 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5983221	A	19991109	US 986339	A	19980113	199954	B
WO 200043911	A1	20000727	WO 99US1299	A	19990122	200038	N

AU 9924636 A 20000807 AU 9924636 A 19990122 200055 N
WO 99US1299 A 19990122

Priority Applications (No Type Date): US 986339 A 19980113; WO 99US1299 A 19990122; AU 9924636 A 19990122
Patent Details:
Patent No Kind Lan Pg Main IPC Filing Notes
US 5983221 A 30 G06F-017/30
WO 200043911 A1 E G06F-017/30
Designated States (National): AL AU BA BB BG BR CA CN CU CZ EE GD GE HR HU ID IL IN IS JP KP KR LC LK LR LT LV MG MK MN MX NO NZ PL RO SG SI SK SL TR TT UA UZ VN YU
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
AU 9924636 A G06F-017/30 Based on patent WO 200043911

Abstract (Basic): US 5983221 A

NOVELTY - The stored documents (300) having abstracts comprising words matching with that of user **query** , are identified. Based on the word matching, the documents are ranked in a relevant order or in order favoring documents having abstracts with terms literally matching with the **query** .

DETAILED DESCRIPTION - The abstracts of documents comprises a series of words generated by selecting a nominal item. The abstract is expandable by applying one of the rules including the addition of nominal item descriptor or connector item specifying the relationship between two nominal items to corresponding nominal item. The rules include the addition of another nominal item and logical connector establishing set of nominal items, to the corresponding nominal item, or addition of logical connector and another descriptor item to **specific descriptor** item. An INDEPENDENT CLAIM is also included for document searching apparatus in **database** of internet.

USE - For performing text based document search in **database** of internet.

ADVANTAGE - The **databases** are constructed to minimize the occurrence of synonymous terms, thereby reducing possibilities of false negative search results. Exploits the relative ease of learning a new grammar, which is highly constrained to few precise rules as compared with learning a new vocabulary. Enables comparing an abstract or **query** by formulating the sentences in accordance with the form classes or expansion rules. The natural language sentence can be translated or decomposed into simpler grammar, without degrading the original vocabulary. Since the sentences are constructed with simple words, even complex sentences can be easily converted into conversational or natural language sentences by modular analysis of basis sentence components.

DESCRIPTION OF DRAWING(S) - The figure schematically illustrates the document searching operation in **database** of internet.

Documents (300)

pp; 30 DwgNo 3/3

Title Terms: TEXT; BASED; DOCUMENT; SEARCH; METHOD; **DATABASE**
Derwent Class: T01
International Patent Class (Main): G06F-017/30
File Segment: EPI

14/5/16 (Item 16 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012804660 **Image available**
WPI Acc No: 1999-610890/199952
Related WPI Acc No: 1999-610876
XRPX Acc No: N99-450139
Precomputed database **processing method for user** query **management**
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC); INFORMIX SOFTWARE INC (INFO-N)
Inventor: COLBY L S; COLE R L; HASLAM E P; JAZAYERI N; JOHNSON G; MCKENNA W

J; WILHITE D G
Number of Countries: 024 Number of Patents: 012
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9950762	A1	19991007	WO 99US6297	A	19990325	199952	B
AU 9931985	A	19991018	AU 9931985	A	19990325	200010	
EP 1066574	A1	20010110	EP 99914054	A	19990325	200103	
			WO 99US6297	A	19990325		
US 20010013030	A1	20010809	US 9849784	A	19980327	200147	
			US 9879670	P	19980327		
			US 9879671	P	19980327		
			US 9879679	P	19980327		
			US 99277034	A	19990325		
BR 9909896	A	20010911	BR 999896	A	19990325	200162	
			WO 99US6297	A	19990325		
JP 2002510088	W	20020402	WO 99US6297	A	19990325	200225	
			JP 2000541606	A	19990325		
US 20020077997	A1	20020620	US 9849784	A	19980327	200244	
			US 9879670	P	19980327		
			US 9879671	P	19980327		
			US 9879679	P	19980327		
			US 99277040	A	19990325		
US 6480836	B1	20021112	US 9849784	A	19980327	200278	
			US 9879670	P	19980327		
			US 9879671	P	19980327		
			US 9879679	P	19980327		
			US 99277041	A	19990325		
US 6493699	B2	20021210	US 9849784	A	19980327	200301	
			US 9879670	P	19980327		
			US 9879671	P	19980327		
			US 9879679	P	19980327		
			US 99277034	A	19990325		
US 6594653	B2	20030715	US 9849784	A	19980327	200348	
			US 9879670	P	19980327		
			US 9879671	P	19980327		
			US 9879679	P	19980327		
			US 99277040	A	19990325		
AU 761900	B	20030612	AU 9931985	A	19990325	200349	
MX 2000009484	A1	20020401	WO 99US6297	A	19990325	200363	
			MX 20009484	A	20000927		

Priority Applications (No Type Date): US 9879679 P 19980327; US 9849784 A 19980327; US 9879670 P 19980327; US 9879671 P 19980327; US 99277034 A 19990325; US 99277040 A 19990325; US 99277041 A 19990325
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9950762	A1	E	57	G06F-017/30	
Designated States (National): AU BR CA JP MX					
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
AU 9931985	A				Based on patent WO 9950762
EP 1066574	A1	E		G06F-017/30	Based on patent WO 9950762
Designated States (Regional): DE ES FR GB IE IT NL SE					
US 20010013030	A1			G06F-007/00	Cont of application US 9849784
					Provisional application US 9879670
					Provisional application US 9879671
					Provisional application US 9879679
					Cont of patent US 6199063
BR 9909896	A			G06F-017/30	Based on patent WO 9950762
JP 2002510088	W		68	G06F-017/30	Based on patent WO 9950762
US 20020077997	A1			G06F-007/00	Cont of application US 9849784
					Provisional application US 9879670
					Provisional application US 9879671
					Provisional application US 9879679
US 6480836	B1			G06F-017/30	Cont of application US 9849784
					Provisional application US 9879670
					Provisional application US 9879671
					Provisional application US 9879679

			Cont of patent US 6199063
US 6493699	B2	G06F-017/30	Cont of application US 9849784 Provisional application US 9879670 Provisional application US 9879671 Provisional application US 9879679
			Cont of patent US 6199063
US 6594653	B2	G06F-017/30	Cont of application US 9849784 Provisional application US 9879670 Provisional application US 9879671 Provisional application US 9879679
AU 761900	B	G06F-017/30	Previous Publ. patent AU 9931985 Based on patent WO 9950762
MX 2000009484	A1	G06F-017/30	Based on patent WO 9950762

Abstract (Basic): WO 9950762 A1

NOVELTY - The user's **query** on specific **database** is analyzed and a common candidate suggestion is generated in sub-language (SQL). Then, an analysis space consisting of all possible subsets of suggestions is defined based on the stored user **query** **database** . The precomputation strategy and suggestions are characterized in the analysis space.

DETAILED DESCRIPTION - During defining suggestions, a specific formula is used depending on the user defined subset data. A log record is generated based on the received user **queries** . Based on the record, specific suggestion data for modifying the user **query** is identified. The common suggestions is generated based on the meta data comprising user specified hierarchical data. A **specific** graph **representing** hierarchical relationship between the suggestions is indicated in the analysis space. An INDEPENDENT CLAIM is also included for precomputed **database** processor.

USE - For user **query** management in decision support system and retail management in stores using relational **database** management system (RDBMS).

ADVANTAGE - Enables evaluation of optical precomputed aggregates, by effective analysis of user **query** . Reduces analysis time, as analysis is carried out based on the user defined subset data. Due to the **query** rewriting facility, aggregate performance of **database** is modified by **database** administrator without affecting **queries** .

DESCRIPTION OF DRAWING(S) - The figure shows the flow chart explaining the precomputed **database** managing method.

pp; 57 DwgNo 7A/13

Title Terms: **DATABASE** ; PROCESS; METHOD; USER; **QUERY** ; MANAGEMENT
Derwent Class: T01
International Patent Class (Main): G06F-007/00; G06F-017/30
File Segment: EPI

14/5/17 (Item 17 from file: 350)
DIALOG(R)File 350:Derwent WPIX

007056521
WPI Acc No: 1987-056518/198708
XRAM Acc No: C87-023647
XRPX Acc No: N87-042910

Markush structure database **system which can handle Markush** queries - **in which separate specific atom and generic term connection tables are linked to reference data e.g. patent nuMbers**

Patent Assignee: AMER CHEMICAL SOC (AMCH-N)
Inventor: FISANICK W
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 4642762	A	19870210	US 84614219	A	19840525	198708	B

Priority Applications (No Type Date): US 84614219 A 19840525
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 4642762	A		37		

Abstract (Basic): US 4642762 A

A method for graphically storing and searching Markush formulae using a computer comprises: (a) forming a file in which each Markush is stored in 2 forms:- (1) Specific multiple connectivity node (SpMCN) representation of all of the individual **specific** structural **representations** (ISSR's) of the formula, in which all the atoms and groups constituting each variable are all attached simultaneously to the atom the variable, so that it is treated as if its valency has been raised to a value high enough to encompass all these connections. (2) Beneric multiple connectivity node (GnMCN) representation, of all the implicit individual **generic** structural **representations** (IGSR's) of the formula. This is analogous to the SpMCN, but consists of generic terms. (3) Reference data is associated with the records for each Markush. (b) A **query** structure is expressed as a GnMCN, and each IGSR of this is compared with each IGSR in the title, to obtain a set of answers in which for each answer, there is an IGSR in the SnMCN which matches an IGSR derived from the **query** Markush. This matching can be by overlap or embedment of the **query** structure in the **database** structure. Reference data is recovered for the answers.

USE/ADVANTAGE - The system provides a searchable graphical **database** of Markush formulae and associated data, such as patent numbers. The **query** may also be a Markush. It is intended to offer total recall combined with very high precision in retrieval.

```
File 348:EUROPEAN PATENTS 1978-2005/Feb W04
         (c) 2005 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20050310,UT=20050303
         (c) 2005 WIPO/Univentio

Set     Items   Description
S1     146973   DATABASE? ? OR DATA()(BASE OR BASES) OR REPOSITOR??? OR (I-
              NFORMATION OR DATA)()MANAGEMENT()SYSTEM? ?
S2      36083   QUERY OR QUERIES OR SEARCH(1W)(EXPRESSION? ? OR STATEMENT?
              ? OR PHRASE? ? OR STRING? ? OR PARAMETER? ? OR PLAN OR PLANS -
              OR STRUCTURE? ? OR CRITERIA OR CRITERION)
S3      28484   (GENERIC OR STANDARD OR REGULAR OR GENERAL OR GLOBAL OR UN-
              IVERSAL OR COMMON OR BROAD OR NONSPECIFIC OR NON()SPECIFIC OR
              UNIFORM)(2W)(DESCRIPTOR? ? OR DESCRIPTER? ? OR METADATA OR ME-
              TA()DATA OR DESCRIB??? OR SYNTAX)
S4      10329   (GENERIC OR STANDARD OR REGULAR OR GENERAL OR GLOBAL OR UN-
              IVERSAL OR COMMON OR BROAD OR NONSPECIFIC OR NON()SPECIFIC OR
              UNIFORM)(2W)(SEMANTIC? ? OR REPRESENT?)
S5      33242   (SPECIAL? OR SPECIFIC OR PROPRIETARY OR INHERENT)(2W)(DESC-
              RIPTOR? ? OR DESCRIPTER? ? OR METADATA OR META()DATA OR DESCR-
              IB??? OR SYNTAX OR SEMANTIC? ? OR REPRESENT?)
S6         40   S3:S4(5N)S5(5N)(DERIV??? OR MAP???? OR REFER??? OR REFEREN-
              C??? OR CORRELAT? OR CORRESPOND? OR ASSOCIAT? OR MATCH??? OR -
              RELATE? ? OR RELATING)
S7     177338   (DESCRIPT? OR METADATA OR META()DATA OR DESCRIB??? OR SYNT-
              AX OR SEMANTIC? ? OR REPRESENT?)(5N)(CODE? ? OR CODING OR ALG-
              ORITHM? ? OR LOGIC OR PROGRAM? ? OR OBJECT? ?)
S8     195042   (DERIV??? OR MAP???? OR REFER??? OR REFERENC??? OR CORRELA-
              T? OR CORRESPOND? OR ASSOCIAT? OR MATCH??? OR RELATE? ? OR RE-
              LATING)(5N)(CODE? ? OR CODING OR ALGORITHM? ? OR LOGIC OR PRO-
              GRAM? ? OR OBJECT? ?)
S9        413   REFERENCE(1W)LOGIC
S10         1   S1(50N)S2(50N)S6
S11         5   S1(30N)S2(30N)S3:S4(30N)S5
S12         3   S1(50N)S2(50N)S9
S13         9   S10:S12
```

13/3,K/2 (Item 2 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

01153716 **Image available**
SEMANTIC KNOWLEDGE RETRIEVAL MANAGEMENT AND PRESENTATION
SYSTEME ET PROCEDE POUR UNE EXTRACTION, UNE GESTION, UNE CAPTURE, UN PARTAGE, UNE DECOUVERTE, UNE DISTRIBUTION ET UNE PRESENTATION DE CONNAISSANCES SEMANTIQUES
Patent Applicant/Assignee:
NERVANA INC, 10838 Main Street, Bellevue WA, 98004, US, US (Residence), US (Nationality)
Inventor(s):
OMOIGUI Nosa, 549 239th Avenue S.E., Redmond, WA 98074, US,
Legal Representative:
BLACK Richard T (agent), Black Lowe & Graham PLLC, 816 Second Avenue, Seattle, WA 98104, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200475466 A2-A3 20040902 (WO 0475466)
Application: WO 2004US4674 20040217 (PCT/WO US04004674)
Priority Application: US 2003447736 20030214
Designated States:
(All protection types applied unless otherwise stated - for applications 2004+)
AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) BW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 160617

13/3,K/3 (Item 3 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00893482 **Image available**
DETERMINATION OF OPTIMAL LOCAL SEQUENCE ALIGNMENT SIMILARITY SCORE
DETERMINATION DE SCORE OPTIMAL DE SIMILARITE D'ALIGNEMENT DE SEQUENCE LOCALE
Patent Applicant/Assignee:
SEEBERG Erling Christen, Borgestadveien 25B, N-0875 Oslo, NO, NO (Residence), NO (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
ROGNES Torbjorn, Motzfeldts gate 16, N-0187 Oslo, NO, NO (Residence), NO (Nationality)
Legal Representative:
MIDTTUN Gisle (agent), Bryns Zacco as, P.O. Box 765, Sentrum, N-0106 Oslo , NO,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200227638 A1 20020404 (WO 0227638)
Application: WO 2001NO394 20010927 (PCT/WO NO0100394)
Priority Application: NO 20004869 20000928
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 9051

Fulltext Availability:
Detailed Description

Detailed Description
... and can be implemented with vectors of any number of elements.

The pseudo-code assumes that the **query** sequence length (in) is a multiple of the vector size, 8. This can be achieved by padding the **query** sequence and **query** score profile.

All vector indices start at zero as is usual in programming languages (not one, as...generally used to represent scalar variables or operations.

io The S-matrix is an x times A **query - specific** score matrix **representing** the score for substituting any of the x different possible **database** sequence symbols with the **query** symbol at any of the n **query** positions. In **general** , x just **represents** the size of the alphabet from which the sequence symbols belong to. For amino acid sequences, x...

13/3,K/7 (Item 7 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2005 WIPO/Univentio. All rts. reserv.

00565352
VIDEO DESCRIPTION SYSTEM AND METHOD
SYSTEME ET PROCEDE DE DESCRIPTION DE VIDEO
Patent Applicant/Assignee:
THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK,
AT & T,
IBM,
EASTMAN KODAK,
PAEK Seungyup,
BENITEZ Ana,
CHANG Shih-Fu,
ELEFTERIADIS Alexandros,
PURI Atul,
HUANG Qian,
LI Chung-Sheng,
JUDICE Charlie,
Inventor(s):
PAEK Seungyup,
BENITEZ Ana,
CHANG Shih-Fu,
ELEFTERIADIS Alexandros,
PURI Atul,
HUANG Qian,
LI Chung-Sheng,
JUDICE Charlie,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200028725 A2 20000518 (WO 0028725)
Application: WO 99US26126 19991105 (PCT/WO US9926126)
Priority Application: US 98107463 19981106; US 99118020 19990201; US 99118027 19990201
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD

RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF
CG CI CM GA GN GW ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 17141

Fulltext Availability:
Detailed Description

Detailed Description
... by each search engine 170, 171, 175 to ensure the satisfaction of the user preferences in the **query** . It will then select the target search engines 170, 171, 175 to be queried by consulting the performance **database** 150. If for example the user wants to search by color and one search engine does not support any color descriptors, it will not be useful to **query** that particular search engine.

Next, the **query** translators 160, 161, 165 will adapt the **query** description to descriptions conforming to each selected search engine. This translation will also be based on the description schemes available from each search engine. This task may require executing extraction code for **standard descriptors** or downloaded extraction code from specific search engines to transform descriptors. For example, if the user specifies the color feature of an object using a color coherence of 166 bins, the **query** translator will translate it to the **specific** color **descriptors** used by each search engine, e.g. color coherence and color histogram of x bins.

Before displaying the results to the user, the **query** interface will merge the results from each search option by translating all the result descriptions into a homogeneous one for comparison and ranking. Again, similarity code for **standard descriptors** or downloaded similarity code from search engines may need to be executed. User preferences will determine how...

13/3,K/8 (Item 8 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00565094 **Image available**
IMAGE DESCRIPTION SYSTEM AND METHOD
SYSTEME ET PROCEDE DE DESCRIPTION D'IMAGES
Patent Applicant/Assignee:
THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK,
AT & T,
IBM,
EASTMAN KODAK,
PAEK Seungyup,
BENITEZ Ana,
CHANG Shih-Fu,
LI Chung-Sheng,
SMITH John R,
BERGMAN Lawrence D,
PURI Atul,
HUANG Qian,
JUDICE Charlie,
Inventor(s):
PAEK Seungyup,
BENITEZ Ana,
CHANG Shih-Fu,
LI Chung-Sheng,
SMITH John R,
BERGMAN Lawrence D,
PURI Atul,
HUANG Qian,
JUDICE Charlie,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200028467 A1 20000518 (WO 0028467)

Application: WO 99US26127 19991105 (PCT/WO US9926127)
Priority Application: US 98107463 19981106; US 99118020 19990201; US 99118027 19990201
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 15002
Fulltext Availability:
Detailed Description

Detailed Description
... by each search engine 170, 171, 175 to ensure the satisfaction of the user preferences in the **query** . It will then select the target search engines 170, 171, 175 to be queried by consulting the performance **database** 150. If for example the user wants to search by color and one search engine does not support any color descriptors, it will not be useful to **query** that particular search engine.

Next, the **query** translators 160, 161, 165 will adapt the **query** description to descriptions conforming to each selected search engine. This translation will also be based on the description schemes available from each search engine. This task may require executing extraction code for **standard descriptors** or downloaded extraction code from specific search engines to transform descriptors. For example, if the user specifies the color feature of an object using a color coherence of 166 bins, the **query** translator will translate it to the **specific** color **descriptors** used by each search engine, e.g. color coherence and color histogram of x bins.
Before displaying the results to the user, the **query** interface will merge the results from each search option by translating all the result descriptions into a homogeneous one for comparison and ranking. Again, similarity code for **standard descriptors** or downloaded similarity code from search engines may need to be executed. User preferences will determine how...

13/3,K/9 (Item 9 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2005 WIPO/Univentio. All rts. reserv.

00565067 **Image available**
SYSTEMS AND METHODS FOR INTEROPERABLE MULTIMEDIA CONTENT DESCRIPTIONS
SYSTEMES ET PROCEDES DESTINES AUX DESCRIPTIONS DE CONTENUS DE MULTIMEDIAS INTEROPERABLES
Patent Applicant/Assignee:
THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OFNEW YORK,
PAEK Seungyup,
BENITEZ Ana,
CHANG Shih-Fu,
Inventor(s):
PAEK Seungyup,
BENITEZ Ana,
CHANG Shih-Fu,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200028440 A1 20000518 (WO 0028440)
Application: WO 99US26125 19991105 (PCT/WO US9926125)
Priority Application: US 98107463 19981106
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB

GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA
MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA
UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD
RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF
CG CI CM GA GN GW ML MR NE SN TD TG

Publication Language: English
Fulltext Word Count: 13253

Fulltext Availability:
Detailed Description

Detailed Description

... by each search engine 170, 171, 175 to ensure the satisfaction of the user preferences in the **query** . It will then select the target search engines 170, 171, 175 to be queried by consulting the performance **database** 150. If the user of client computer I IO wants to search by color and one search engine does not support any color descriptors, it will not be useftil to **query** that particular search engine.

Next, the **query** translators 160 will adapt the **query** description to descriptions conforming to each selected search engine. This translation will also be based on the description schemes available from each search engine. This task may require executing extraction code for **standard descriptors** or downloaded extraction code from specific search engines to transform descriptors. For example, if the user specifies the color feature of an object using a color coherence of 166 bins, the **query** translator will translate it to the **specific** color **descriptors** used by each search engine, e.g. color coherence and color histogram of x bins.

Before displaying the results to the user, the **query** interface will merge the results from each search option by translating all the result descriptions into a homogeneous one for comparison and raking. Again, similarity code for **standard descriptors** or downloaded similarity code from search engines may need to be executed. User preferences will determine how the results are displayed to the user.

Alternatively, a search **query** can be entered via client computer 180 which directly interfaces with target search engine 170. Unlike a...

```
File   8:Ei Compendex(R) 1970-2005/Mar W1
         (c) 2005 Elsevier Eng.  Info. Inc.
File  35:Dissertation Abs Online 1861-2005/Feb
         (c) 2005 ProQuest Info&Learning
File  65:Inside Conferences 1993-2005/Mar W2
         (c) 2005 BLDSC all rts. reserv.
File   2:INSPEC 1969-2005/Feb W4
         (c) 2005 Institution of Electrical Engineers
File  94:JICST-EPlus 1985-2005/Jan W5
         (c)2005 Japan Science and Tech Corp(JST)
File 483:Newspaper Abs Daily 1986-2005/Mar 12
         (c) 2005 ProQuest Info&Learning
File   6:NTIS 1964-2005/Mar W1
         (c) 2005 NTIS, Intl Cpyrght All Rights Res
File 144:Pascal 1973-2005/Mar W1
         (c) 2005 INIST/CNRS
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File  34:SciSearch(R) Cited Ref Sci 1990-2005/Mar W1
         (c) 2005 Inst for Sci Info
File  99:Wilson Appl. Sci & Tech Abs 1983-2005/Feb
         (c) 2005 The HW Wilson Co.
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
         (c) 2002 The Gale Group
File 266:FEDRIP 2005/Jan
         Comp & dist by NTIS, Intl Copyright All Rights Res
File  95:TEME-Technology & Management 1989-2005/Feb W1
         (c) 2005 FIZ TECHNIK
File 438:Library Lit. & Info. Science 1984-2005/Feb
         (c) 2005 The HW Wilson Co

Set     Items   Description
S1     749770   DATABASE? ? OR DATA()(BASE OR BASES) OR REPOSITOR??? OR (I-
              NFORMATION OR DATA)()MANAGEMENT()SYSTEM? ?
S2     106048   QUERY OR QUERIES OR SEARCH(1W)(EXPRESSION? ? OR STATEMENT?
              ? OR PHRASE? ? OR STRING? ? OR PARAMETER? ? OR PLAN OR PLANS -
              OR STRUCTURE? ? OR CRITERIA OR CRITERION)
S3      15829   (GENERIC OR STANDARD OR REGULAR OR GENERAL OR GLOBAL OR UN-
              IVERSAL OR COMMON OR BROAD OR NONSPECIFIC OR NON()SPECIFIC OR
              UNIFORM)(2W)(DESCRIPTOR? ? OR DESCRIPTER? ? OR METADATA OR ME-
              TA()DATA OR DESCRIB??? OR SYNTAX)
S4      18651   (GENERIC OR STANDARD OR REGULAR OR GENERAL OR GLOBAL OR UN-
              IVERSAL OR COMMON OR BROAD OR NONSPECIFIC OR NON()SPECIFIC OR
              UNIFORM)(2W)(SEMANTIC? ? OR REPRESENT?)
S5      12138   (SPECIAL? OR SPECIFIC OR PROPRIETARY OR INHERENT)(2W)(DESC-
              RIPTOR? ? OR DESCRIPTER? ? OR METADATA OR META()DATA OR DESCR-
              IB??? OR SYNTAX OR SEMANTIC? ? OR REPRESENT?)
S6          9   S3:S4(5N)S5(5N)(DERIV??? OR MAP???? OR REFER??? OR REFEREN-
              C??? OR CORRELAT? OR CORRESPOND? OR ASSOCIAT? OR MATCH??? OR -
              RELATE? ? OR RELATING)
S7     335776   (DESCRIPT? OR METADATA OR META()DATA OR DESCRIB??? OR SYNT-
              AX OR SEMANTIC? ? OR REPRESENT?)(5N)(CODE? ? OR CODING OR ALG-
              ORITHM? ? OR LOGIC OR PROGRAM? ? OR OBJECT? ?)
S8     315422   (DERIV??? OR MAP???? OR REFER??? OR REFERENC??? OR CORRELA-
              T? OR CORRESPOND? OR ASSOCIAT? OR MATCH??? OR RELATE? ? OR RE-
              LATING)(5N)(CODE? ? OR CODING OR ALGORITHM? ? OR LOGIC OR PRO-
              GRAM? ? OR OBJECT? ?)
S9         42   REFERENCE(1W)LOGIC
S10         8   RD S6 (unique items)
S11         0   S1 AND S2 AND S10
S12       266   S3:S4 AND S5
S13        11   S1 AND S2 AND S12
S14         0   S1 AND S2 AND S9
S15         9   RD S13 (unique items)
```

15/5/1 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

02524649 E.I. Monthly No: EIM8801-004628
Title: SEMANTIC QUERY OPTIMIZATION IN EXPERT SYSTEMS AND DATABASE SYSTEMS.
Author: Chakravarthy, U. S.; Fishman, D. H.; Minker, J.
Corporate Source: Univ of Maryland, USA
Conference Title: Expert Database Systems, Proceedings from the First International Workshop.
Conference Location: Kiawah Island, SC, USA Conference Date: 19841024
Sponsor: Univ of South Carolina, Coll of Business Administration, Inst of Information Management, Technology & Policy, Columbia, SC, USA
E.I. Conference No.: 10562
Source: Publ by Benjamin/Cummings Publ Co, Menlo Park, CA, USA p 659-674
Publication Year: 1986
ISBN: 0-8053-3270-7
Language: English
Document Type: PA; (Conference Paper)
Journal Announcement: 8801
Abstract: Knowledge representation is an integral part of any knowledge base or expert system. The usefulness of first order predicate logic to represent knowledge is well understood. Using logic, problem specific knowledge can be represented as a set of general laws (intensional axioms or production rules), assertions (facts) and integrity constraints. In this paper we are concerned with the use of problem **specific semantics** expressed in logic to answer **queries** over the knowledge base in an efficient manner, in the presence of **general** axioms. The **semantics** is expressed as clauses in predicate logic generally termed as integrity constraints. The proposed approach termed semantic compilation compiles the semantics (integrity constraints) together with the general laws of the system and permits **queries** to be answered efficiently. Usage of semantics in relational **databases** (without deductive axioms) is a special case of the formalism presented in this paper. (Author abstract) 23 refs.
Descriptors: ***DATABAS** E SYSTEMS--* **Query** Languages; ARTIFICIAL INTELLIGENCE--Expert Systems; COMPUTER PROGRAMMING--Algorithms
Identifiers: SEMANTIC **QUERY** OPTIMIZATION; KNOWLEDGE REPRESENTATION; PROBLEM **SPECIFIC SEMANTICS** ; **SEMANTIC** COMPILATION; INTEGRITY CONSTRAINTS; MODIFIED PARTIAL SUBSUMPTION ALGORITHM
Classification Codes:
723 (Computer Software)
72 (COMPUTERS & DATA PROCESSING)

15/5/2 (Item 2 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

01480164 E.I. Monthly No: EI8401003952 E.I. Yearly No: EI84062567
Title: CHEMICAL SUBSTANCE RETRIEVAL SYSTEM FOR SEARCHING GENERIC REPRESENTATIONS **. 1. A PROTOTYPE SYSTEM FOR THE GAZETTED LIST OF EXISTING CHEMICAL SUBSTANCES OF JAPAN.**
Author: Kudo, Yoshihiro; Chihara, Hideaki
Corporate Source: Japan Assoc for Int Chemical Information, Tokyo, Jpn
Source: Journal of Chemical Information and Computer Sciences v 23 n 3 Aug 1983 p 109-117
Publication Year: 1983
CODEN: JCISD8 ISSN: 0095-2338
Language: ENGLISH
Journal Announcement: 8401
Abstract: A prototype information retrieval system has been developed to search for either a specific substance or a family of substances of which the **query** compound is a member. The **query** itself can be generic. The **data base** of the system consists of a name file and a notation file, the latter being searched with **specially** designed **representations** as the keys. Three different representations of varying levels of generality were designed to permit a generic search corresponding to a specific compound

the searcher inputs. A small-scale **data base** was built from the gazetted list of Existing Chemical Substances (Japanese legislation). Examples of searches are given. 20 refs.
Descriptors: *INFORMATION RETRIEVAL SYSTEMS
Classification Codes:
723 (Computer Software); 901 (Engineering Profession)
72 (COMPUTERS & DATA PROCESSING); 90 (GENERAL ENGINEERING)

15/5/3 (Item 1 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online

01556774 ORDER NO: AAD97-16450
DATABASE **MODELS AND** QUERY **LANGUAGES FOR RELATIONAL DATA AND METADATA** QUERY **PROCESSING**
Author: JAIN, MANOJ KUMAR
Degree: PH.D.
Year: 1996
Corporate Source/Institution: INDIANA UNIVERSITY (0093)
Chair: DIRK VAN GUCHT
Source: VOLUME 57/12-B OF DISSERTATION ABSTRACTS INTERNATIONAL. PAGE 7603. 192 PAGES
Descriptors: COMPUTER SCIENCE
Descriptor Codes: 0984

Relational **database** systems do not effectively support **queries** which are independent of **specific metadata** context. The conventional relational **query** languages require that all **queries** , even the metadata independent **queries** , be formulated in strict accordance with the metadata of the **database** . Therefore, any change in metadata requires the reformulation of metadata independent **queries** --a very unnatural way of dealing with such **queries** . We call this phenomenon the metadata dependence problem of relational **query** languages. This dissertation describes our approaches to incorporate effective metadata **query** processing in relational **database** systems using reflective and meta-level techniques. We classify the approaches for achieving combined relational data and metadata querying capabilities in relational **database** systems into two categories: (1) extending the relational **query** languages with reflection principles, and (2) embedding the relational **database** model into a richer data model. We present our research in each of these categories, which serves to provide theoretical insights into the expressiveness and complexity of **query** languages that allow combined relational data and metadata querying capabilities.

Reflection in relational **query** languages is achieved by storing and manipulating **queries** as relations and by adding an evaluation operator to the **query** language. Van den Bussche, Van Gucht, and Vossen introduced a reflective relational algebra and showed that extending a **query** language with reflection mechanism not only increases its expressive power but also has several applications involving various forms of procedural data management. An useful application of a reflective **query** language is that it allows metadata independent expression of **queries** which suffer from metadata dependence problem. We extend the work done by Van den Bussche, Van Gucht, and Vossen and also present the reflective extension of the nested relational algebra.

As an approach belonging to the second category, we introduce a new model, the uniform **database** model, and its **query** languages. This approach permits the metadata to be treated as data. This **uniform** treatment of **metadata** and data allows for design of **query** languages that are immune to the metadata dependence problem. Besides providing metadata **query** processing capabilities, these uniform **query** languages can efficiently simulate conventional relational **query** languages. We present the properties of this model and its **query** languages and also situate this research in terms of expressiveness and complexity classes.

15/5/4 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC

8064745 INSPEC Abstract Number: C2004-09-6160B-014

Title: Improving access to multi-dimensional self-describing scientific datasets

Author(s): Nam, B.; Sussman, A.

Author Affiliation: Dept. of Comput. Sci., Univ. of Maryland, College Park, MD, USA

Conference Title: CCGRID 2003. Proceedings of the Third IEEE/ACM International Symposium on Cluster Computing and the Grid p.172-9

Editor(s): Lee, S.; Sekiguchi, S.; Matsuoka, S.; Sato, M.

Publisher: IEEE Comput. Soc, Los Alamitos, CA, USA

Publication Date: 2003 Country of Publication: USA xviii+745 pp.

ISBN: 0 7695 1919 9 Material Identity Number: XX-2003-01857

U.S. Copyright Clearance Center Code: 0-7695-1919-9/03/$17.00

Conference Title: Proceedings of the Third IEEE/ACM International Symposium on Cluster Computing and the Grid

Conference Sponsor: IEEE Comput. Soc

Conference Date: 12-15 May 2003 Conference Location: Tokyo, Japan

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: Applications that **query** into very large multidimensional datasets are becoming more **common** . Many self- **describing** scientific data file formats have also emerged, which have structural metadata to help navigate the multi-dimensional arrays that are stored in the files. The files may also contain application- **specific semantic metadata** . In this paper, we discuss efficient methods for performing searches for subsets of multi-dimensional data objects, using semantic information to build multidimensional indexes, and group data items into properly sized chunks to maximize disk I/O bandwidth. This work is the first step in the design and implementation of a generic indexing library that will work with various high-dimension scientific data file formats containing semantic information about the stored data. To validate the approach, we have implemented indexing structures for NASA remote sensing data stored in the HDF format with a specific schema (HDF-EOS), and show the performance improvements that are gained from indexing the datasets, compared to using the existing HDF library for accessing the data. (15 Refs)

Subfile: C

Descriptors: **database** indexing; distributed **databases** ; meta data; **query** formulation; very large **databases**

Identifiers: multidimensional datasets; self-describing scientific data file formats; structural metadata; multidimensional arrays; application-**specific semantic metadata** ; disk I/O bandwidth; indexing structures; NASA remote sensing data

Class Codes: C6160B (Distributed databases); C7250R (Information retrieval techniques)

15/5/6 (Item 1 from file: 266)

DIALOG(R)File 266:FEDRIP

00198931

IDENTIFYING NO.: 0354707 AGENCY CODE: NSF

FRG: Collaborative research: Algorithms for sparse data representations

PRINCIPAL INVESTIGATOR: DeVore, Ronald A

PERFORMING ORG.: University South Carolina Research Foundation, Mathematics/Statistics, Columbia, SC 29208

PROJECT MONITOR: Warchall, Henry A.

SPONSORING ORG.: National Science Foundation, DMS, 4201 Wilson Boulevard , Arlington, Virginia 22230

DATES: 20040915 TO 20070831 FY : 2004 FUNDS: $875,000 (800000)

SUMMARY: The investigators address the mathematical underpinnings of compressing large data sets using sparse representations over rich dictionaries and develop a foundation for classifying these problems in terms of their algorithmic complexity. The investigators also find efficient algorithms for computing high-quality sparse representations of

data over sophisticated, commonly used dictionaries that provably perform as claimed with respect to both efficiency and correctness of output and are particularly well-suited for massive data set applications. The research proceeds at multiple levels of abstraction. It considers general factors of a representation class that guarantee or preclude such algorithms, it considers algorithms for **specific common representation** classes, and it finds algorithms for representation classes adapted to specific common (and diverse) applications, such as solutions of partial differential equations, image processing, and **database query** optimization. Over the past ten years there has been a dramatic increase in data gathering mechanisms, as well as an ever-increasing demand for finer data analysis in applications that rely on scientific and geometric modeling. Each day, literally millions of large data sets are generated in medical imaging, surveillance, and scientific acquisition. In addition, the internet has become a communication medium with vast capacity, generating massive traffic data sets. The usefulness of these data sets rests on our ability to process them efficiently, whether it be for storage, transmission, visual display, fast on-line graphical **query** , correlation, or registration against data from other modalities. The current state of the art in data processing is far from providing the efficient and faithful representations required in emerging applications. With few exceptions, previous work has not provided algorithms whose efficiency or output quality, though typically validated experimentally, has been analyzed rigorously and thoroughly. The investigators carry out fundamental mathematical and algorithmic research to significantly increase our capacity to process and manage large data sets. The research makes significant mathematical progress in providing rigorous algorithmic results that are of great need in this field. The research also makes significant improvements through highly efficient algorithms in the sizes of data sets that are analyzable and in the types of data processing tasks that can be carried out. Finally, the investigators create a library of software for massive data processing applications.

```
File 275:Gale Group Computer DB(TM) 1983-2005/Mar 16
         (c) 2005 The Gale Group
File 621:Gale Group New Prod.Annou.(R) 1985-2005/Mar 16
         (c) 2005 The Gale Group
File 636:Gale Group Newsletter DB(TM) 1987-2005/Mar 16
         (c) 2005 The Gale Group
File  16:Gale Group PROMT(R) 1990-2005/Mar 15
         (c) 2005 The Gale Group
File 160:Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 148:Gale Group Trade & Industry DB 1976-2005/Mar 16
         (c)2005 The Gale Group
File 624:McGraw-Hill Publications 1985-2005/Mar 16
         (c) 2005 McGraw-Hill Co. Inc
File  15:ABI/Inform(R) 1971-2005/Mar 16
         (c) 2005 ProQuest Info&Learning
File 647:CMP  Computer Fulltext 1988-2005/Feb W4
         (c) 2005 CMP Media, LLC
File 674:Computer News Fulltext 1989-2005/Mar W2
         (c) 2005 IDG Communications
File 696:DIALOG Telecom. Newsletters 1995-2005/Mar 15
         (c) 2005 The Dialog Corp.
File 369:New Scientist 1994-2005/Feb W4
         (c) 2005 Reed Business Information Ltd.

Set     Items   Description
S1    1945671   DATABASE? ? OR DATA()(BASE OR BASES) OR REPOSITOR??? OR (I-
               NFORMATION OR DATA)()MANAGEMENT()SYSTEM? ?
S2     206955   QUERY OR QUERIES OR SEARCH(1W)(EXPRESSION? ? OR STATEMENT?
               ? OR PHRASE? ? OR STRING? ? OR PARAMETER? ? OR PLAN OR PLANS -
               OR STRUCTURE? ? OR CRITERIA OR CRITERION)
S3      11961   (GENERIC OR STANDARD OR REGULAR OR GENERAL OR GLOBAL OR UN-
               IVERSAL OR COMMON OR BROAD OR NONSPECIFIC OR NON()SPECIFIC OR
               UNIFORM)(2W)(DESCRIPTOR? ? OR DESCRIPTER? ? OR METADATA OR ME-
               TA()DATA OR DESCRIB??? OR SYNTAX)
S4      35648   (GENERIC OR STANDARD OR REGULAR OR GENERAL OR GLOBAL OR UN-
               IVERSAL OR COMMON OR BROAD OR NONSPECIFIC OR NON()SPECIFIC OR
               UNIFORM)(2W)(SEMANTIC? ? OR REPRESENT?)
S5      25403   (SPECIAL? OR SPECIFIC OR PROPRIETARY OR INHERENT)(2W)(DESC-
               RIPTOR? ? OR DESCRIPTER? ? OR METADATA OR META()DATA OR DESCR-
               IB??? OR SYNTAX OR SEMANTIC? ? OR REPRESENT?)
S6         22   S3:S4(5N)S5(5N)(DERIV??? OR MAP???? OR REFER??? OR REFEREN-
               C??? OR CORRELAT? OR CORRESPOND? OR ASSOCIAT? OR MATCH??? OR -
               RELATE? ? OR RELATING)
S7     134580   (DESCRIPT? OR METADATA OR META()DATA OR DESCRIB??? OR SYNT-
               AX OR SEMANTIC? ? OR REPRESENT?)(5N)(CODE? ? OR CODING OR ALG-
               ORITHM? ? OR LOGIC OR PROGRAM? ? OR OBJECT? ?)
S8     337533   (DERIV??? OR MAP???? OR REFER??? OR REFERENC??? OR CORRELA-
               T? OR CORRESPOND? OR ASSOCIAT? OR MATCH??? OR RELATE? ? OR RE-
               LATING)(5N)(CODE? ? OR CODING OR ALGORITHM? ? OR LOGIC OR PRO-
               GRAM? ? OR OBJECT? ?)
S9         58   REFERENCE(1W)LOGIC
S10         0   S1(50N)S2(50N)S6
S11         3   S1(30N)S2(30N)S3:S4(30N)S5
S12         0   S1(50N)S2(50N)S9
S13        41   S1(30N)S2(30N)S3:S5(30N)S7:S8
S14        44   S11 OR S13
S15        31   RD (unique items)
S16        25   S15 NOT PD>20000216
```

16/3,K/1 (Item 1 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

02192865 SUPPLIER NUMBER: 20215467 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Java and object databases collide: developing with the ODMG Java binding. (Technology Tutorial) (Tutorial) (Cover Story)
Moy, Chu
Databased Web Advisor, v16, n2, p14(7)
Feb, 1998
DOCUMENT TYPE: Tutorial Cover Story ISSN: 1090-6436 LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 3636 LINE COUNT: 00331

ABSTRACT: Version 2.0 of the Object **Database** Management Group's (ODMG) object **database** standard includes a Java binding, which Sun's JavaSoft subsidiary has adopted as a standard and will incorporate into its Java Blend API **object** -relational **mapping** interface. Techniques for developing **object database** applications under the new API are presented. The ODMG's Java binding adds native object extensions to...

...and bases its serialization on a 'persistence by reachability' concept. Sun's endorsement ensures that the object **databases** are just standardized enough to give developers trust and confidence but flexible enough to allow room for...
...programming features. The ODL is identical to the Java language itself and allows modeling of inheritance with **standard** Java **syntax** . Examples and segments of source **code** are provided. There is also an implementation of the OQL **query** language.

16/3,K/2 (Item 2 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

02154323 SUPPLIER NUMBER: 20430772 (USE FORMAT 7 OR 9 FOR FULL TEXT)
How to Clean Up That Messy Metadata; Microsoft's OIM update could serve as a standard for data warehouses. (extensions to Microsoft's Repository and Open Information Model may facilitate metadata integration) (Company Business and Marketing)
Moad, Jeff
PC Week, v15, n12, p79(2)
March 23, 1998
ISSN: 0740-1604 LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 1164 LINE COUNT: 00096

... do just that. Next month, the Redmond, Wash., company is expected to publish extensions to the Microsoft **Repository** and OIM (Open Information Model) that many vendors and IS managers hope will become the foundation for...

...metadata integration. Currently, design tools such as Logic Works Inc.'s ERwin, for example, have their own **repositories** and create **proprietary metadata** . The same goes for data transformation tools such as Extract from Evolutionary Technologies Inc. and for **query** and reporting tools such as Business Objects from Business Objects Inc. While some companies, such as Prism Solutions Inc. and Platinum Technology Inc., have teamed up to create bidirectional interfaces between their own **repositories** , that doesn't help organizations with tools that don't use the same interfaces.
That's where...

...Microsoft effort comes in. While OIM was announced last summer and positioned as a common definition for **standard metadata** integration, the initial version was targeted mainly at client/server application development tools. Version 2 of OIM...

...to data warehousing tools.
Building bridges

So far, 65 vendors have signed up to support the Microsoft **Repository** and OIM in some fashion. Some, including Platinum Technology, have already said they'll replace their own **repository** with the Microsoft **Repository** and extend their data model to support OIM. Others, such as SAS Institute Inc., have said they'll build a bridge between their **repository** and data model and the Microsoft **Repository** and OIM. If enough vendors fall in line and actually deliver, data warehousing tools could begin to...

16/3,K/3 (Item 3 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

02109732 SUPPLIER NUMBER: 19799949 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Making information organization universal. (Bell Atlantic's implementation of Logic Works' Logic Works Universal Directory data warehousing tool) (Company Operations)
Campbell, Richard
Databased Web Advisor, v15, n10, p62(2)
Oct, 1997
ISSN: 1090-6436 LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 1911 LINE COUNT: 00152

... of this drilling might point to a specific report, or assist in the development of a custom **query** that can be processed by Sterling Clear Access or another appropriate reporting tool. The primary concept here...

...of taking information and trying to determine its significance, accuracy, and relationship to the business.
Where many **database** products have metadata tools for describing their own data, Universal Directory stands on its own. It doesn't store data about itself, it stores data about everyone else. **Logic** Works **Universal** Directory consolidates **metadata** together, for the benefit of the people who set up the data warehouse, and for the people...

16/3,K/4 (Item 4 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

02104520 SUPPLIER NUMBER: 19758444 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Audit history and time-slice archiving in an object DBMS for laboratory databases. (ChemStudy) (Product Information)
Loomis, Timothy
Hewlett-Packard Journal, v48, n4, p80(10)
August, 1997
ISSN: 0018-1153 LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 8181 LINE COUNT: 00643

... comment before commit.
Object Access
Revision and Time Retrieval. An audited object can be retrieved from the **database** by specifying either a specific revision of the object or by specifying an absolute time and finding the object that was current at that time. A **special** time token **represents** current time (also known as NOW in the literature), **corresponding** to the most recent **object** revision. Accessing objects by absolute time requires that the commit timestamp of an **object** be determined so that it **corresponds** correctly to the actions of multiple clients in a distributed **database** environment. A consistent source of time must be available to all clients and time must be specified
...
...example is the best way to explain why both access methods are needed. A common way to **query** the **database** history in Fig. 4 would be to locate the current Dept1 and then ask to see each...

16/3,K/5 (Item 5 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

02052332 SUPPLIER NUMBER: 19275635
Informix Universal Server opens doors.(Informix Software object-relational database)(Product Announcement)
Simeonides, Alex
SunExpert, v8, n3, p22(2)
March, 1997
DOCUMENT TYPE: Product Announcement ISSN: 1053-9239 LANGUAGE: English RECORD TYPE: Abstract

ABSTRACT: Informix Software's Informix **Universal** Server **represents** a new class of **database** , called the object-relational **database** (ORDBMS), that supports simple querying of complex data types. A merger of Informix's Dynamic Scalable Architecture (DSA) with the Object-Relational model of 1995 acquisition Illustra Information Technologies, Universal Server accepts **queries** via a SQL-3 dialect. The ORDBMS also supports such **object - related** features as polymorphism and inheritance. Universal Server also features Illustra's Text DataBlade, Web DataBlade, Image DataBlade...

...2D and 3D DataBlade. These tools enable a developer to define custom data types and equip a **database** to process them.

16/3,K/6 (Item 6 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

01674879 SUPPLIER NUMBER: 15068645 (USE FORMAT 7 OR 9 FOR FULL TEXT)
1994 market directory issue: more than 600 information technology company listings. (vendors of health technology-related products and services, organizations and events) (Directory)
Health Management Technology, v15, n3, p14(113)
Feb 15, 1994
DOCUMENT TYPE: Directory LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 69033 LINE COUNT: 06228

... Informix, Ingres) and most popular H/W and O/S platforms
Software tha allows users to query **relational** databases **using** conversational English, without concern for complex database **structure** or special **syntax** . **Generates** optimized SQL code **for** the individual database, **sends** it to the database **for** processing, then presents the data as a sentence, table or graph.
Navin Group, Inc. 80 Washington St...

16/3,K/7 (Item 7 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

01605803 SUPPLIER NUMBER: 13970237 (USE FORMAT 7 OR 9 FOR FULL TEXT)
ODBC - what it does & what it doesn't. (Microsoft Corp.'s Open Database Connectivity standard for client/server computing)
Davies, Chris
EXE, v7, n11, p12(3)
May, 1993
ISSN: 0268-6872 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 1623 LINE COUNT: 00128

ABSTRACT: Microsoft Corp's Open **Database** Connectivity (ODBC) standard is an important beginning to open client/server computing but does not in itself...

...and share data openly. The main components of the ODBC standard include calls for connection to the **database** server and retrieval of data, a standard Structured **Query** Language (SQL) **syntax** and standard error

codes . ODBC also defines a **standard representation** for data types. An ODBC system would have a client application to make calls to the Driver...

...the standard to act as clients or a means for users to untie themselves from a proprietary **database** . ODBC also does not address network transparency, having a dynamic link library (DLL) that can talk to any **database** from the client end, or having a way to maximize data transfer between client and server.

16/3,K/8 (Item 8 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2005 The Gale Group. All rts. reserv.

01593732 SUPPLIER NUMBER: 13737865 (USE FORMAT 7 OR 9 FOR FULL TEXT)
New blood, new power. (Cover Story) (Software Review) (overview of nine evaluations of relational databases) (includes related articles on Editors' Choices, Suitability to Task ratings, how products were tested, dBASE IV, Magic Software's Magic, CA-dBFast) (Evaluation)
Browning, Dave
PC Magazine, v12, n9, p108(34)
May 11, 1993
DOCUMENT TYPE: Evaluation ISSN: 0888-8507 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 8356 LINE COUNT: 00655

... to products with a file/server architecture rather than a client/server architecture.

Multiuser file/server relational **databases** are the first step up from single-user standalone applications into the world of shared data. In the file/server architecture, all executable portions of the **database** application run on the client PC; the network file server simply stores the shared data files and provides locking services. When a client PC executes a **query** , the server sends all potential data to the client, which then discards whatever isn't needed. The...
...validity checking, even if the rules are stored on the server.

In the client/server architecture, the **database** server contains the shared files along with data-integrity and validation rules--and also some "intelligence." The client application contains the menus, forms, report definitions, and **program code associated** with the user interface. The server performs **query** processing as specified by the clients and sends only the information resulting from **queries** back across the network to the client. The client/server approach is more reliable and faster for...

...mission-critical applications, but file/server systems are a more cost-effective solution for most other business **database** needs.

THE RELATIONAL HURDLE

The term "relational" has a very specific theoretical definition, but in **common** usage it **describes** a system composed of separate files (or tables) that together comprise a single **database** . The separate tables are often in a one-to-many relationship; that is, detail records related to...

16/3,K/9 (Item 9 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2005 The Gale Group. All rts. reserv.

01418875 SUPPLIER NUMBER: 10441752 (USE FORMAT 7 OR 9 FOR FULL TEXT)
'Father of object databases' Thomas Atwood discusses object design, C++, SQL (Structured Query Language)
Ring, Katy
Computergram International, n1628, CGI03080009
March 8, 1991
ISSN: 0268-716X LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 1147 LINE COUNT: 00091

... that evolution means letting things die. In his opinion the best compromise between the two generations of **database** lies with an

object-oriented structured **query** language. As SQL exists at present there is a clash between its own compiler as an intermediate...to learn two languages and how they go together; or the reverse could be done. That is **Object** SQL could adopt the **syntax** of the programming language to maintain the **common semantics** of the **object** model leading to a cleaner, simpler implementation. As for concerns that object-oriented programming requires a methodology...

16/3,K/10 (Item 10 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

01336787 SUPPLIER NUMBER: 09179921
Logic-based approach to semantic query optimization. (technical)
Chakravarthy, Upen S.; Grant, John; Minker, Jack
ACM Transactions on Database Systems, v15, n2, p162(46)
June, 1990
DOCUMENT TYPE: technical ISSN: 0362-5915 LANGUAGE: ENGLISH
RECORD TYPE: ABSTRACT

ABSTRACT: The **query** language provided by deductive data **bases** is more powerful than those provided by relational query languages. Another advantage of deductive **data bases** over relational **data bases** is that they provide a uniform representation for expressing **database** components. Deductive **data bases** allow relations to be defined implicitly in terms of stored relations, thereby extending relational **data bases** . Current syntactic optimization techniques are not sufficient for the **data bases** of the future. The approach for semantic query optimization which uses first-order logic formulas to describe the entire deductive **data base** and queries is more general than other techniques and works for both conventional and deductive **data bases** .

16/3,K/11 (Item 11 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

01297273 SUPPLIER NUMBER: 07230164 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Rule-based structural design in C.
Leaman, Claire M.
AI Expert, v4, n5, p28(7)
May, 1989
ISSN: 0888-3785 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 4373 LINE COUNT: 00328

... depend on chains of other rules, which may in turn cause more rule firings and other SQL **queries** .

As well as querying **databases** , RBC rules can update, delete, and insert records within them. All these operations use **standard** SQL **syntax** .

Integrating a rule-based **program** with a **database** system offers many advantages. Often a rule-based program makes use of information most naturally represented in...

...programs, for example, need to access tables of engineering data. By storing this information in an SQL **database** table, we can leave it in its most common form instead of coercing it into the RBC...

16/3,K/12 (Item 12 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

01213904 SUPPLIER NUMBER: 06673287
Natural language processing.
Hirschberg, Julia; Ballard, Bruce W.; Hindle, Donald
AT & T Technical Journal, v67, n1, p41(17)

Jan-Feb, 1988
ISSN: 8756-2324 LANGUAGE: ENGLISH RECORD TYPE: ABSTRACT

...ABSTRACT: and generation of human language. Currently, we are focusing on the development of grammatical formalisms and parsing **algorithms** , appropriate **semantic representations** for word and sentence meaning, and ways of specifying more elusive meanings that depend on knowledge of the context of utterance. Applications of natural language research include interfaces to expert systems and **database query** systems, machine translation, text generation, story understanding, and computer-aided instruction. In this paper, we introduce NLP research in **general** and **describe** three NLP projects under way at AT & T Bell Laboratories in Murray Hill, New Jersey. (Reprinted by...

16/3,K/13 (Item 1 from file: 621)
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

02232200 Supplier Number: 57569760 (USE FORMAT 7 FOR FULLTEXT)
I/B/E/S Brings a New Level of Integrated Data and Technology To the Institutional Investment Marketplace.
PR Newswire, p5011
Nov 15, 1999
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 645

... any content with third party products and proprietary client information, the I/B/E/S Virtual Financial **Database** Technology incorporates a **proprietary meta - data** architecture and **query** generator **program** , using artificial intelligence to retrieve data on-the-fly from any standard **database** engine such as Microsoft, SQL Server, Oracle or Sybase.

Active Express version 3.1 can take earnings estimates from an I/B/E/S **database** in New York, fundamental data from a supplier in London such as Primark's Extel unit, portfolio...

16/3,K/14 (Item 2 from file: 621)
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

01316085 Supplier Number: 45897517 (USE FORMAT 7 FOR FULLTEXT)
Prism Solutions Supports Development of Meta Data Standards for Data Warehouses; Availability of Prism Directory Manager 2.0 on November 30 Marks Industry's First Solution for Integrating and Exchanging Meta Data.
Business Wire, p10310231
Oct 31, 1995
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 586

... meta data from the key software components used in a data warehouse, including development tools, CASE tools, **repositories** , **query** tools and data analysis tools.

Prism Directory Manager 2.0 provides a direct link for sharing **meta data** with Business **Objects** ' BusinessObjects, HP's Intelligent Warehouse, Information Advantage's DecisionSuite and MicroStrategy's DSS Agent and DSS Architect. By creating a **common** layer of **meta data** between Prism Directory Manager and compatible products, this link greatly simplifies the population of meta data, saves...

...use of the CASE Data Interchange Format (CDIF) for importing and exporting meta data, and ODBC (Open **Database** Connection) and TCP/IP for client/server communications.

The Metadata Coalition will introduce a phased, multi-level...

16/3,K/15 (Item 3 from file: 621)
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

01064588 Supplier Number: 40293754 (USE FORMAT 7 FOR FULLTEXT)
HARRIS TO OFFER ACCELL (R) ON ITS HCX AND MCX COMPUTER SYSTEMS
News Release, p1
Feb 10, 1988
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 678

... development tools including a comprehensive application generator, a fourth generation language, a windowing environment, and a relational **database** that provides excellent performance in transaction processing.

With the ACCELL visual application generator, developers can quickly create...

...Generator-produced applications may then be customized with the ACCELL fourth generation language, which automatically combines Structured **Query** Language (SQL) **standard** **syntax** with the **code** produced by the application generator.

ACCELL offers sophisticated user interfaces such as a windowing environment with Zoom Views (TM), allowing a user to create a window into other parts of a **database** and retrieve additional information without leaving the current screen display. Along with concurrent data access, ACCELL provides...

...locking facilities and built-in integrity checks.

Unlike other 4GL development environments, ACCELL integrates a comprehensive relational **database** management system that has been optimized for transaction-oriented applications. This relational **database** , with the same architecture that is used by the UNIFY (R) database management system, gives ACCELL better...

16/3,K/16 (Item 1 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)

01440339 Supplier Number: 41920241 (USE FORMAT 7 FOR FULLTEXT)
"FATHER OF OBJECT DATABASES" THOMAS ATWOOD DISCUSSES OBJECT DESIGN, C++, SQL
Computergram International, n1628, pN/A
March 8, 1991
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 1078

... that evolution means letting things die. In his opinion the best compromise between the two generations of **database** lies with an object-oriented structured **query** language. As SQL exists at present there is a clash between its own compiler as an intermediate...

...to learn two languages and how they go together; or the reverse could be done. That is **Object** SQL could adopt the **syntax** of the programming language to maintain the **common** **semantics** of the **object** model leading to a cleaner, simpler implementation. As for concerns that object-oriented programming requires a methodology...

16/3,K/17 (Item 1 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2005 The Gale Group. All rts. reserv.

06505027 SUPPLIER NUMBER: 13828084 (USE FORMAT 7 OR 9 FOR FULL TEXT)
New software features full text of ERIC digests. (Query) (Brief Article)
Online, v17, n3, p83(1)
May, 1993
DOCUMENT TYPE: Brief Article ISSN: 0146-5422 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT
WORD COUNT: 197 LINE COUNT: 00016

TEXT:

LMP Associates announced the availability of **Query** the best minds in education--a combination of search software and a **database** of over 850 Digests produced by the 16 ERIC Clearinghouses. **Query** contains 1,200 word essays that summarize current issues in education, outline differing viewpoints, answer key questions and identify significant articles. Users can search using **standard** ERIC **descriptors** ; or they can search for any work, phrase, or name that might appear in the title, author, abstract, or **descriptors** . **Query** supports full Boolean **logic** and offers pull-down menus, simple instructions, and mouse support.

16/3,K/18 (Item 1 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(c) 2005 ProQuest Info&Learning. All rts. reserv.

01696272 03-47262
The IBM data warehouse architecture
Bontempo, Charles; Zagelow, George
Communications of the ACM v41n9 PP: 38-48 Sep 1998
ISSN: 0001-0782 JRNL CODE: ACM
WORD COUNT: 3419

...TEXT: and matrix calculations; and SQL access to the star schema RDBMS. To facilitate administration of a starschema **database** , ir creates, populates, and manages tables, indexes, and summary tables automatically. This solution benefits from the open...

...is an end-user-oriented tool that catalogs these sources and manages their metadata. It also manages **descriptive** data on information-bearing **objects** , such as reports, **queries** , spreadsheets, documents, and images, as well as on data objects, such as tables, views, and attributes of the DB2 family and of other non-IBM RDBMSs.

Data warehouse tools generally do not share **common** schemes for **representing** metadata. Addressing this problem, DataGuide performs metadata interchange using a documented Tag Language format and includes extractors...

...including Extract, Essbase, and many non-IBM tools for querying, reporting, and analyzing warehouse data.

Information catalog **objects** are hierarchically organized into business-**related** groups that can be searched using business-oriented search terms (aided by a DataGuide glossary) or by...

16/3,K/19 (Item 2 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(c) 2005 ProQuest Info&Learning. All rts. reserv.

01641798 02-92787
Project Memory: Information Management for Project Teams
Weiser, Mark; Morrison, Joline
Journal of Management Information Systems: JMIS v14n4 PP: 149-166 Spring 1998
ISSN: 0742-1222 JRNL CODE: JMI

WORD COUNT: 6115

...TEXT: the memories ofthe individuals involved. It attempts to capture, retain, and integrate "hard" project data (such as **database** records, documents, and standard operating procedures) with "soft" items (such as stories, recollections of critical incidents, and...

...memos, product release statements, and service manuals using an object-oriented data model [2]. Users can create **specific** fields to **describe** these **objects** (e.g., reviewer-name, modification...

...date). Along with **query** capabilities that use specific field values, users may also perform full-text searches. The system supports creation of "views," or specific subsets of the **database** , both for security and to reduce the potential search space for a given subject area.
Answer Garden...

16/3,K/20 (Item 3 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)

01586561 02-37550
An overview of the Annual Review of Information Science and Technology and summary of Volume 32
Williams, Martha E
American Society for Information Science. Bulletin v24n3 PP: 20-23 Feb/Mar 1998
ISSN: 0095-4403 JRNL CODE: BAS
WORD COUNT: 3041

...TEXT: information retrieval (IR) that integrates the requirements of a research chemist for graph-theoretic algorithms with the **database** designs of computer science. Paris's review identifies and discusses the current research topics in this area, covers selected portions of the literature, which exploded between 1989 and 1996, and addresses the **general** issues of **representation** , comparison and **matching** **algorithms** , and retrieval strategies. This IR research, and the resultant implementation and application of chemical structure retrieval software...

...the representation and searching of flexible 3D chemical models. Additional special topics include quality control of chemical **database** content, chemical similarity and clustering, **query** refinement, visualization, chemical structure "corpus linguistics" and molecular diversity. Paris concludes by identifying current trends in both...

16/3,K/21 (Item 4 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)

01266520 99-15916
The influence of database structure representation on database system learning and use
Leitheiser, Robert L; March, Salvatore T
Journal of Management Information Systems: JMIS v12n4 PP: 187-213 Spring 1996
ISSN: 0742-1222 JRNL CODE: JMI
WORD COUNT: 9908

...TEXT: part of their language study. Lochovsky and Tsichritzis [23] compared the effectiveness of table, tree, and network **database** representations. They found some advantage to using table and network representations in a programming task but confounded ...performed studies where only the representation was varied while the language remained constant. Mayer used "concrete office **objects** " to **describe** the structure and processing of a **database** . The control group was presumably given the **standard** tabular **representation** . The office **object**

representation resulted in improved comprehension of an SQL-like language.

In their experiment, Kenney et al. [21] compared...
...No significant differences were found in between the treatment groups. One interpretation of these results is that **database** representation has no influence on effective **database** use. Alternatively, it should be noted that the observed effects came from the combination of **database** representation and use of a specific **query** language (SQL). This study does not address what might happen if the query language was changed. It... with the representation learning and use results, we must conclude that graphics did not help in training **database** users or in helping them to use the system. This result is troubling because significant expense is...

...Finally, evidence exists to reject hypothesis 6 and conclude that the explicit representation of relationships negatively impacts **query** language learning and use. This result occurred in spite of a demonstrated benefit to explicit representations in the database representation stage.

The focus of this study has been on features of representations rather than **specific representations** . The relative merits of LDS versus E-R diagrams are less important than the fact that entity...

...We believe that the results have some application to other representation approaches. The objectoriented approaches to modeling **databases** offer new (but related) semantics. They also typically (e.g., [9]) involve graphical symbols and explicit representation of relationships. Our findings suggest that any advantage **object** -oriented **representations** provide to **database** users will come from the semantics used rather than from the proposed symbolic notation. Confirmation of this ...

...is an exciting new area of research.

The primary goal of this study was to show that **database** representations should be considered in research and practice. Our findings suggest that previous studies have missed an important variable by failing to consider the way **database** structure is presented to users. A secondary goal was to explore the influence of three **specific representation** dimensions on **database** and **query** language learning and use. Varying degrees of evidence were found linking representation semantics, symbols, and relationship representation to **database** and query language learning and use. Finally, we wished to explore the research problems associated with the interaction of **database** representations and query languages. The results discussed here clearly show that **database** representations that are beneficial to users trying to understand the contents of a database, may be a...

16/3,K/22 (Item 5 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)

01108404 97-57798
Data warehouse shortcuts due from Sybase
Cole, Barb
Network World v12n40 PP: 1, 6 Oct 2, 1995
ISSN: 0887-7661 JRNL CODE: NWW
WORD COUNT: 509

TEXT: Sybase, Inc. is quietly turning its flagship **database** and middleware into a system for automating the creation of data warehouses.

The company will roll out...

...can access it from across the enterprise.

Sybase officials confirmed that the company is creating new technology, **code** -named Conveyor, to unify **metadata** from Sybase **database** ,

middleware and application development products, as well as from other vendors' programs.

Data warehouses pull information from networked applications and **databases** into a data store, which provides a single place for running **queries** and mining business trends.

Today, building a data warehouse is costly and time-consuming because data must be moved from existing data stores--sometimes manually--and metadata needs to be translated into a **common** format. **Metadata** is information about data from operational **databases** and other applications, and it typically is based on a proprietary format. So, for example, it is not uncommon for one **database** to define sales numbers one way and another to do it a different way.

Conveyor technology, when...

16/3,K/23 (Item 6 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)

00767479 94-16871
The evolution of the meta-data concept: Dictionaries, catalogs, and repositories
Gillenson, Mark L; Frost, Raymond D
Journal of Database Management v4n3 PP: 17-26 Summer 1993
ISSN: 1063-8016 JRNL CODE: DAN
WORD COUNT: 6215

...TEXT: Itasca OODBMS, class is, itself, a "first-class object," with all of the classes in the application **database** collected together in a class of classes. However, attributes and methods do not have their own classes ...

...for the run-time environment. Significantly, the Versant system includes a "Browser" facility which permits people to **query** the schema and get meta-data information about the stored **databases** .

In **general** , the **meta - data** philosophy of these systems is that the data definition type of meta-data that includes the basic structural information of the **databases** is all included in the schema, which functions, in effect, like a relational catalog. GemStone calls this... ...world." Other dictionary-like functions, such as maintaining a list of programmers and program modules in the **object** -oriented programming environment and **relating** which programmers wrote which modules, can be implemented like any other application in the OODBMS. In fact, CASE tools, including **repositories** , have been implemented using these OODBMSs. This creates a multi-level meta-data environment, which follows the...

16/3,K/24 (Item 7 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)

00483422 90-09179
Representing Generalizations and Exceptions in Expert Database Systems
Ramirez, Richard G.; Dattero, Ronald; Choobineh, Joobin
Decision Support Systems v6n1 PP: 29-44 Mar 1990
ISSN: 0167-9236 JRNL CODE: DSS

ABSTRACT: Research has suggested the development of expert **database** systems to increase the decision support capabilities of **database** management systems. One approach adds logic capabilities to relational **databases** . **Database** systems handle data **representing** specific facts, while **logic** allows the specification of **general** rules **representing** abstract knowledge. However, exceptions are present in almost any generalization. Formal definitions and examples of classification rules